

Williamson 2/1/96

SN 4874

In Reply Refer To: MS 5232

FEB 05 1996

ANR PIPELINE COMPANY
Attention: Mr. John P. Lucido
500 Renaissance Center
Detroit, Michigan 48234

Gentlemen:

Your letter dated October 30, 1995, requests approval to abandon in place 443 feet (.084 miles) of 8 5/8-inch pipeline designated as Segment No. 4874, and to relinquish in its entirety, Right-of-Way Grant OCS-G 3642, associated therewith. The subject pipeline originates at Platform No. 12 and extends to a tie-in with ANR PIPELINE COMPANY's 8 5/8-inch pipeline, Right-of-Way OCS-G 2124E, Segment No. 3785, in Block 71, West Cameron Area.

Pursuant to 30 CFR 250.4(b), approval is hereby granted to abandon the above-described pipeline, and in accordance with 30 CFR 250.159(c)(9), the requirement that the pipeline be removed is hereby waived. However, in the future should it be determined that this abandoned pipeline constitutes a hazard to navigation or commercial fishing operations or unduly interferes with other uses of the Outer Continental Shelf, ANR PIPELINE COMPANY shall be required to remove it.

Pursuant to 30 CFR 250.150(b), the relinquishment of the right-of-way grant associated with the pipeline that is to be abandoned in place is hereby accepted effective January 9, 1996.

Please be advised that 30 CFR 250.150(b) states in part that an application shall be submitted to this office and approval granted prior to the modification of a pipeline right-of-way. Therefore, this office should have been notified before the subject pipeline was cut at each end. Your compliance with this regulation in regards to other right-of-way grants issued to ANR PIPELINE COMPANY is expected. Please submit a report to this office indicating the date the pipeline-abandonment operations were completed.

Sincerely,

(Orig. Sgd.) Kent E. Stauffer

Donald C. Howard
Regional Supervisor
Field Operations

bcc: 1502-01 (P/L OCS-G 3642) w/orig request (K.Faust) (MS 5232)
1502-01 (P/L OCS-G 3642) w/cy of request (microfilm) (MS 5033)
MS 5421
MS 5232 Carto

ABecnel:jvl:01/25/96:ANR-pl.642

G 3642

*on mcf
2/12/96
IS*

UNITED STATES GOVERNMENT
MEMORANDUM

December 1, 1995

To: Leasing Activities Section, Adjudication Unit (MS 5421)
From: Petroleum Engineer, Pipeline Unit, Office of Field Operations, Gulf
of Mexico OCS Region (MS 5232)
Subject: Adjudication of Pipeline Right-of-Way Relinquishment and Abandonment
Right-of-Way OCS-G 3642, Pipeline Segment No. 4874

The subject relinquishment request is attached for your adjudication. If you
have any questions regarding this matter, please contact Mr. Warren Williamson
at extension 2874.

Warren Williamson

Attachments

Application Dated October 30, 1995 (received November 1, 1995) w/attachment
Please initial, date, and return if request meets all necessary criteria.

Initial Jaimes , Date 1-9-96

RECEIVED
DEC 5 1995

MINERALS MANAGEMENT SERVICE
LEASING & ENVIRONMENT



ANR Pipeline Company
A SUBSIDIARY OF THE COASTAL CORPORATION

October 30, 1995

The Energy People

John P. Lucido
VICE PRESIDENT
ENGINEERING AND CONSTRUCTION

Mr. Donald C. Howard
Regional Supervisor of Field Operations
U.S. Department of the Interior
Minerals Management Service
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394

RE: Request For Relinquishment and Abandonment of Right of Way ANR Pipeline Company's Existing 8" Natural Gas Pipeline, All In Block 71, West Cameron Area, From Mobil Platform 71-12 To a Subsea Tap Assembly On ANR's Existing 8" Pipeline, Permit OCS- G 2124-E, Segment # 3785, Offshore Louisiana, Gulf of Mexico

Attention Mr. Mike Conner

Attention MS 5232

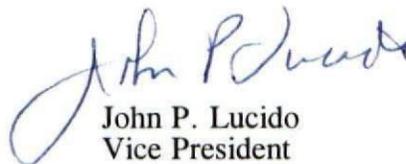
ANR Pipeline Company received approval from the MMS on February 28, 1978 for the construction of the aforementioned 8" pipeline in the West Cameron Area, from Mobil's Platform 71-12 to a subsea tie-in on ANR's existing 8" pipeline (OCS-G 2124-E, Segment #3785) under Permit Number OCS-G 3642, Segment #4874.

Mobil has advised ANR of their intentions to remove the Platform at 71-12 and that they have previously cut, capped and buried both ends of our pipeline at 71-12 and at the subsea tie-in. Please note this memo accompanies a similar request to abandon and relinquish the right of way for the 8" pipeline and subsea tie-in from Platforms 71-7 to 71-E (OCS-G 2124-E, #3785).

Therefore, if notification of the status of this pipeline meets with your approval, ANR respectfully requests confirmation be issued to reflect that Segment Number #4874 is permanently abandoned and that the right of way has been relinquished.

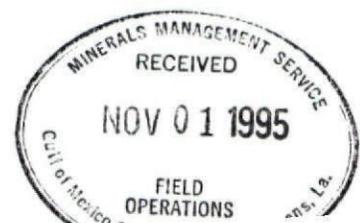
This application is being forwarded in triplicate and inquires concerning this correspondence can be directed to the applicant at ANR Pipeline Company, 500 Renaissance Center, Detroit, Michigan 48243, Attention Raymond W. Martyniuk, General Land Agent, Land Department, Telephone (313) 496 5594.

Very truly yours,


John P. Lucido
Vice President

JPL:RWM:kh
cc: S.R. Anderson
T.J. Purcell
M.J. Williams
Sabine Pass Area

500 RENAISSANCE CENTER
DETROIT, MICHIGAN 48243
313/496-7115





UNITED STATES DEPARTMENT OF THE INTERIOR
MINERALS MANAGEMENT SERVICE
GULF OF MEXICO REGION
IMPERIAL OFFICE BLDG., 3301 N. CAUSEWAY BLVD.
P. O. BOX 7944
METAIRIE, LOUISIANA 70010

SN 4874

504-837-4720

G 3642

In Reply Refer To: LE-3-1
N. O. Misc. No. 160

October 9, 1984

ACTION

BEST AVAILABLE COPY

ANR PIPELINE COMPANY

Right-of-Way

CHANGE OF NAME RECOGNIZED

On October 4, 1984, there was filed in this office evidence of change of name from Michigan Wisconsin Pipe Line Company to ANR PIPELINE COMPANY, effective January 1, 1984.

In connection with this change, the following evidence was received:

1. Certificate duly executed by Lewis R. Hellman, Secretary of ANR PIPELINE COMPANY on March 8, 1984, reflecting the following:
 - A. Officers listed therein are empowered to execute for and on behalf of the company;
 - B. Attached thereto are true and correct copies of the Certificate of Amendment of Certificate of Incorporation including the Certificate of the Secretary of State of the State of Delaware;
 - C. ANR PIPELINE COMPANY is incorporated under the laws of the State of Delaware;
 - D. ANR PIPELINE COMPANY is authorized to hold mineral leases and/or rights-of-way on the Outer Continental Shelf;
2. Copy of a resolution unanimously adopted by Consent Action of the Board of Directors of ANR PIPELINE COMPANY as of September 25, 1984, duly certified by Lewis R. Hellman, Secretary of the corporation, on October 3, 1984;
3. Bond Rider to be attached to and form a part of Outer Continental Shelf Right-of-Way Grant Bond Number U 76 88 93 changing the name of the principal from Michigan Wisconsin Pipe Line Company to ANR PIPELINE COMPANY, effective January 1, 1984;

G 3642

BEST AVAILABLE COPY

N. O. Misc. No. 160

2

4. Listing of the pipeline rights-of-way to be affected by the change of name.

In view of the evidence submitted, the change of ownership as to the pipeline rights-of-way listed below is recognized and the records so noted:

<u>OCS-G NO.</u>	<u>OCS-G NO.</u>	<u>OCS-G NO.</u>
1503	3353	4023
1503-A	3367	4033
1503-B	3371	4052
1505	3427	4053
1687	3428	4054
1687-A	3429	4151
1687-B	3453	4157
1687-D	3456	4159
1687-E	3457	4167
1687-I	3623	4168
1687-K	3625	4272
1687-M	3641	4278
1693-J	3642 ✓	4279
1905	3653	4280
1907-AA	3654	4293
2124	3847	4312
2124-A	3859	4621
2124-B	3922	5138
2124-D	3923	5155
2124-E	4014	5266


John L. Rankin
Regional Director

cc:
Lessee/Grantee and Associates
Case Files
N. O. Misc. No. 160



United States Department of the Interior

IN REPLY REFER TO

OCS-G 3642

BUREAU OF LAND MANAGEMENT

NEW ORLEANS OUTER CONTINENTAL SHELF OFFICE West Cameron Area

HALE BOGGS FEDERAL BUILDING

500 CAMP STREET-SUITE 841

NEW ORLEANS, LA. 70130

October 17, 1979

SN 41874

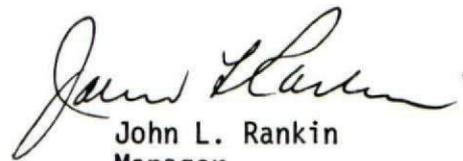
OCT 23 1979

DECISION

Michigan Wisconsin Pipe Line Company	:	Right of Way for Pipe Line
	:	
	:	Date of Permit: 2/24/78
	:	
	:	Decision Requesting Proof of Construction Dated:
	:	
	:	Proof of Construction Received: 9/27/79

Proof of Construction Accepted

The above-captioned permittee has submitted the evidence required by the law and regulations 43 CFR 2883.2-3(a). The proof of construction is hereby accepted and approved, with minor deviation.


 John L. Rankin
 Manager

cc: U. S. Geological Survey
(w/dwgs. and reports)

NOTED-MC INTOSH

Ford, Bacon & Davis Construction Corporation

TELEPHONE 318/388-1530

ENGINEERS - CONSTRUCTORS

TWX: 510-977-5395

3901 JACKSON STREET
P. O. BOX 1762
MONROE, LOUISIANA 71201

September 24, 1979

H-2502B
MW-OS-26.2

Mr. John L. Rankin, Manager
Outer Continental Shelf Land Office
Bureau of Land Management
Hale Boggs Federal Building
500 Camp Street, Suite 841
New Orleans, LA 70130

Dear Mr. Rankin:

OCS-G 3642
Block 71-12
West Cameron Area

In accordance with the requirements contained in the above referenced decision, we have enclosed three (3) copies of the as-built drawings indicating the route of the 8-5/8-inch pipeline. This routing is shown on drawings C-6E, sheets 1 of 2 and 2 of 2 as trunk number 615-32. In addition to the as-built maps we have also enclosed three (3) copies of the hydrostatic test reports for the line pipe and related facilities. This work was completed in September of 1978.

All requirements of the individual leaseholders have been met. Should you require additional data concerning this project, please contact our office to the attention of the writer.

Very truly yours,



W. K. Peaker
Project Manager - Offshore

crn
Enclosure

cc: Mr. Walter Dunn
Ms. Alta B. Lawn

RECEIVED
SEP 27 12 24 PM '79
NEW ORLEANS, LA.
BUREAU OF LAND MANAGEMENT
OUTER CONTINENTAL SHELF
SPECIAL SERVICE

- Michigan Wisconsin Pipe Line Company
- Michigan Consolidated Gas Company
- Great Lakes Gas Transmission Company

Report No. 37 1

BEST AVAILABLE COPY

Sheet 1 of 1

Project Name: 8-inch Riser Assembly, Plat. 71-12 W.C. Design Pressure: 2000 PSIG

State: Houma, La. ~~XXXXX~~

Job No.: H-2159B Work Order No.: 4496

Construction Contractor: Santa Fe Engr. & Const. Co.

Testing Contractor: Santa Fe Engr. & Const. Co.

Test Medium: Water Gas Air Other

RECEIVED
SUPERIOR OIL COMPANY
NEW ORLEANS, LA.
12 26 PM '79

COMPLETE FOR PIPELINE TEST ONLY

Limits: M.P. _____ Station _____ + _____ to M.P. _____ Station _____ + _____

Pipe Specifications: _____ "O.D. X _____ "W.T. Grade _____ Manuf. _____

Gauge Point Pressure: Maximum _____ PSIG, Minimum _____ PSIG

Gauge Point Elevation: _____ Ft. Station _____ + _____

Low Point Pressure: _____ PSIG Elevation: _____ Ft.

High Point Pressure: _____ PSIG Elevation: _____ Ft.

Drawing No. _____

COMPLETE FOR ASSEMBLY TEST ONLY

Test Pressure: Maximum 4000 PSIG, Minimum: 3800 PSIG

Description of Assembly-Including Related Drawing Numbers: APX 100 ln/ft. 8-inch Grade "B" pipe.

8-inch riser assembly, Superior Oil Co. Platform 71-12, Col A-2 West Cameron

Block 71, Drawing No. M(LA)-D0-901, Sheet 1 of 2.

TESTING EQUIPMENT

Pressure Pump: Make: McFarland Serial No.: 615 Capacity: .33 Gals/Stroke

Deadweight Gauge: Make: Chandler Serial No.: 9853

Pressure Recorder: Make: Barton Type 242A Serial No.: 2132

Temperature Recorder: Make: Barton Type 242A Serial No.: 4163

DEADWEIGHT READINGS (PSIG)

Date Test On February 24, 1978				Date Test Off February 25, 1978			
TIME P.M.	PRESSURE PSIG	TEMP °F AMB. PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP °F AMB. PIPE	REMARKS
0700	3803	31 35		1900	3812	52 62	* to 3947
0722	3800	36 40	* to 3826	2000	2883	52 58	
0800	3826	43 49		2100	3815	51 58	
0900	3849	50 50		2110	3805	51 57	* to 3950
1000	3908	58 54		2200	3891	50 57	
1030	3951	60 55	o to 3804	2300	3829	50 57	
1100	3853	62 59		2330	3805	50 56	* to 3947
1150	3945	63 62	o to 3800	2400	3923	50 56	
1300	3948	65 65		0100	3878	47 54	
1324	4000	67 66	o to 3896	0130	3854	46 52	Test off
1327	3896	67 66					
1427	4000	69 70	o to 3923				
1500	3954	64 70					
1553	4000	64 71	o to 3980				
1600	3981	64 71					
1700	3957	60 67					
1800	3891	56 65					

Indicators: * Repressure • Bleed

For Additional Readings Use New Form

Comments: _____

Weather Conditions: _____ **BEST AVAILABLE COPY**

Titness (Company Representative): *Roy Mullins* Date: *2/24/78*
 Contractor Representative: *Empa Co* Date: *2/24/78*
 Reviewed by: *Scott Davis* Date: *7-11-78*
 Approved by: *A. E. Peaker* Date: *7-11-78*

12 NOON

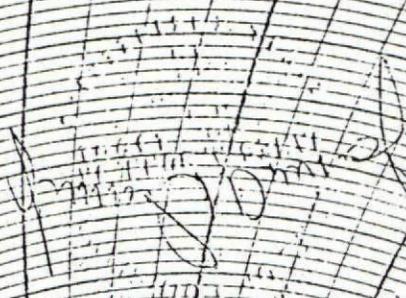
1 P.M.

9 A.M.

8 A.M.

7 A.M.

PRINTED IN U.S.A.



CHARTS 2 of 2
 CALIBRATED
 HARTS
 BATAVIA
 N.Y.

METER NUMBER
TIME PUT ON
DATE PUT ON
19

TUBE & DRIF. SIZE
TIME TAKEN OFF
DATE TAKEN OFF
19

BR-2259
 B 0-300-12

SIGNED _____

BEST AVAILABLE COPY

2 A.M.

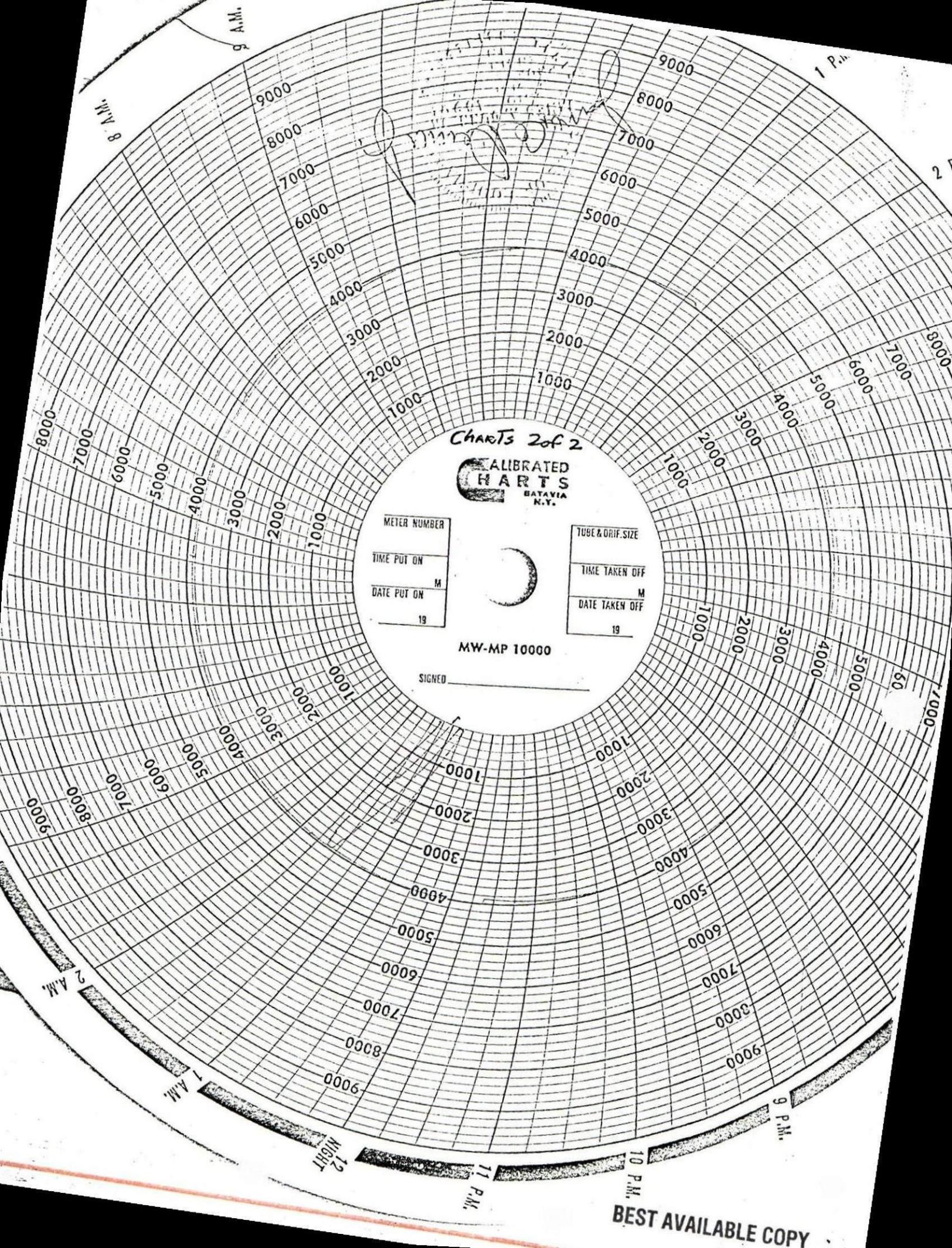
1 A.M.

12 NIGHT

10 P.M.

9 P.M.

8 P.M.



Charts 2 of 2



METER NUMBER
TIME PUT ON
DATE PUT ON
M
19

TUBE & ORIF. SIZE
TIME TAKEN OFF
DATE TAKEN OFF
M
19

MW-MP 10000

SIGNED _____

BEST AVAILABLE COPY

PRESSURE TEST REPORT
AMERICAN NATURAL SERVICE COMPA

- Michigan Wisconsin Pipe Line Company
- Michigan Consolidated Gas Company
- Great Lakes Gas Transmission Company

BEST AVAILABLE COPY

Report No. 2
Sheet 1 of 2

Project Name: West Camron 71 Tie-In Assm. Design Pressure: 2000 PSIG
State: Louisiana Parish Terrebonne (Santa Fe Fab Yard)
Job No.: H-2159-B Work Order No.: 4496
Construction Contractor: Santa Fe
Testing Contractor: C.S.I. Hydrostatic Testers

Test Medium: Water Gas Air Other

COMPLETE FOR PIPELINE TEST ONLY

Limits: M.P. _____ Station _____ + _____ to M.P. _____ Station _____ + _____
Pipe Specifications: _____ "O.D. X _____ "W.T. Grade _____ Manuf. _____
Gauge Point Pressure: Maximum _____ PSIG, Minimum _____ PSIG
Gauge Point Elevation: _____ Ft. Station _____ + _____
Low Point Pressure: _____ PSIG Elevation: _____ Ft.
High Point Pressure: _____ PSIG Elevation: _____ Ft.

Drawing No. _____

COMPLETE FOR ASSEMBLY TEST ONLY

Test Pressure: Maximum 4000 PSIG, Minimum: 3800 PSIG
Description of Assembly—Including Related Drawing Numbers: 6" Tie-In to Platform 71-12
Drawing AL-PL-01-A-127

TESTING EQUIPMENT

Pressure Pump: Make: McFarland Serial No.: 355 Capacity: .064 Gals/Stroke
Deadweight Gauge: Make: Chandler Serial No.: 4 10394
Pressure Recorder: Make: Barton Serial No.: 6 4
Temperature Recorder: Make: Barton Serial No.: 6

HEADWEIGHT READINGS (PSIG)

Date Test On 09:43 4/18/78				Date Test Off 09:43 4-19-78			
TIME P.M.	PRESSURE PSIG	TEMP °F AMB. PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP. °F AMB. PIPE	REMARKS
9:20	STARTED FILLING			1:05	3867	87	
9:28	COMP. FILLING						
9:30	BEGAN PRESSURING			2:05	3886	85	
9:35	3018	74	CK. FOR LEAKS				
	TEST MANAFOLD LEAKING			3:05	3883	86	
9:39	STARTED UP WITH PRESSURE						
9:43	3800	75	ON TEST	4:05	3816	85	*3900
				5:00	3816	83	*4000
10:43	3971	79		6:00	3855	80	
10:50	3995	80	3800	6:20	3810	79	*4000
				6:50	3930	76	
11:50	3838	84					
5p.m.	3845	86		7:50	3810	74	*4000
				8:40	3888	73	

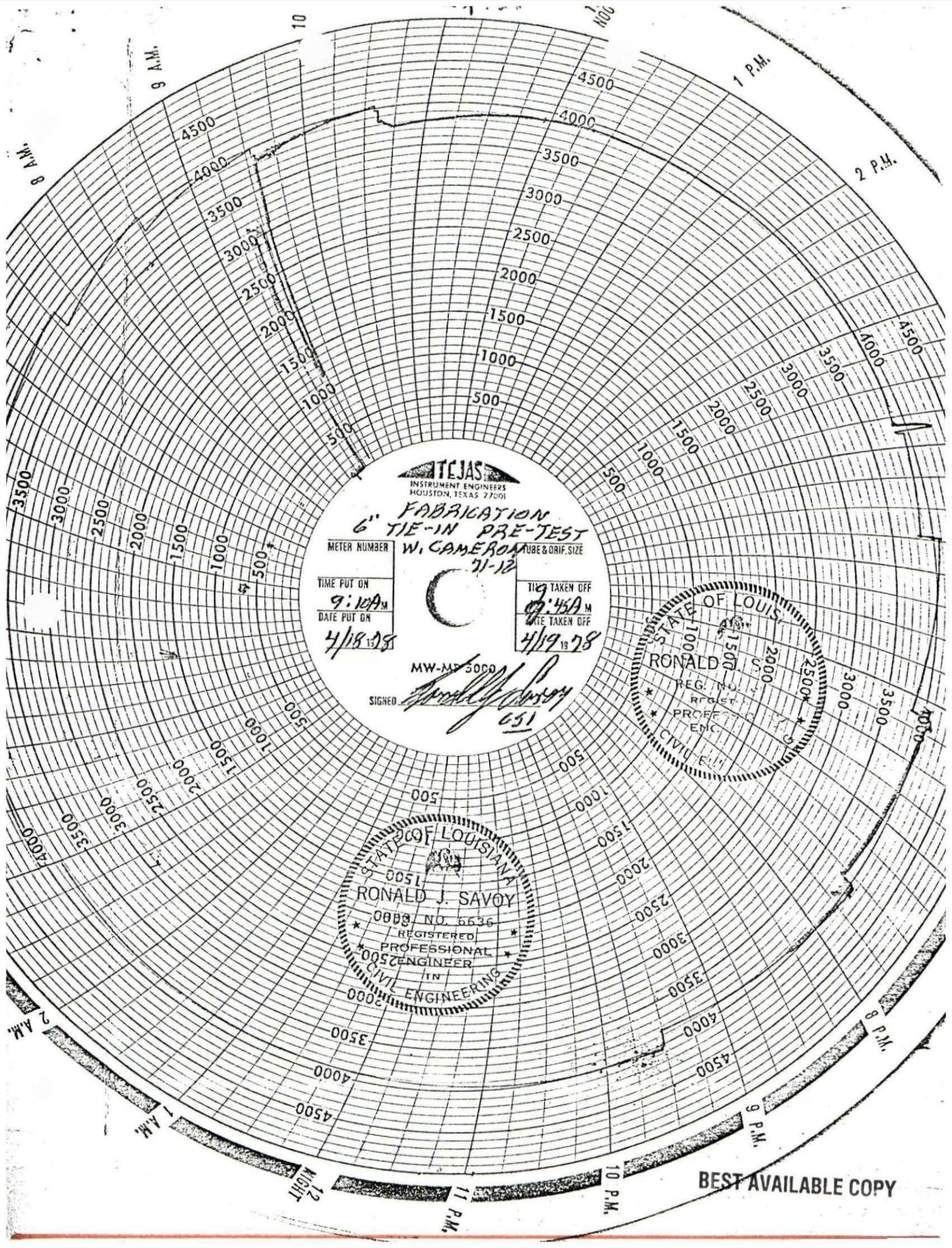
Indicators: * Repressure • Bleed For Additional Readings Use New Form

Comments: _____

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Weather Conditions: Clear and warm

Test Witness (Company Representative): G. F. Black Date: 4-19-78
 Contractor Representative: [Signature] Date: 5-29-78
 Reviewed by: Scott Davis Date: 7-11-78
 Approved by: [Signature] Date: 7-11-78



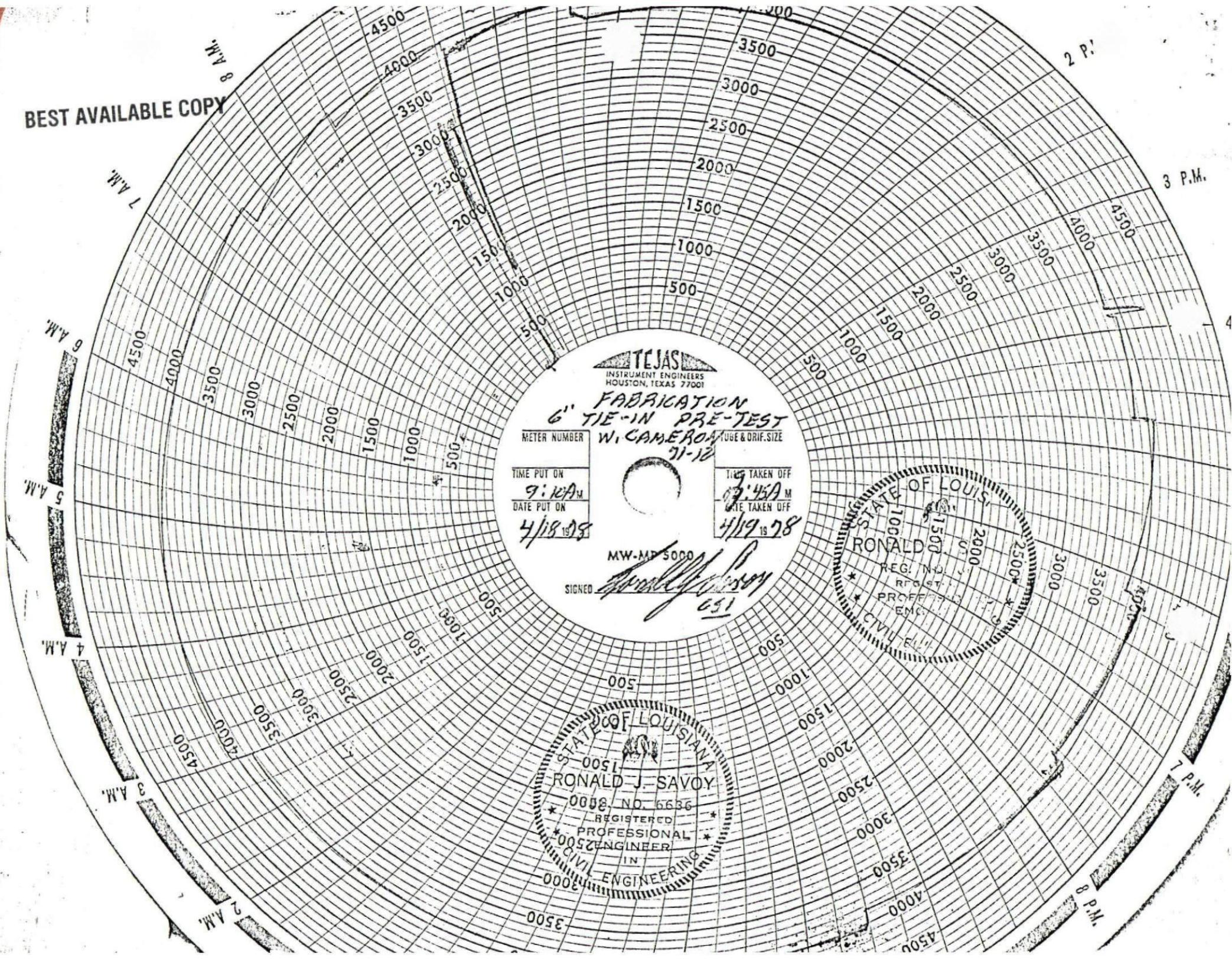

 INSTRUMENT ENGINEERS
 HOUSTON, TEXAS 77001
FABRICATION
6" TIE-IN PRE-TEST
 METER NUMBER **W. CAMERON** TUBE & ORIF. SIZE
 71-12
 TIME PUT ON **9:10 A.M.**
 DATE PUT ON **4/18/78**
 TIME TAKEN OFF **9:45 A.M.**
 DATE TAKEN OFF **4/19/78**
 MW-MF 5000
 SIGNED *Ronald J. Savoy* 651

STATE OF LOUISIANA
 100
 1500
 2000
 2500
 3000
 3500
 4000
 RONALD J. SAVOY
 REG. NO. 6636
 REGISTERED
 PROFESSIONAL
 ENGINEER
 IN
 CIVIL ENGINEERING

STATE OF LOUISIANA
 0051
 1500
 2000
 2500
 3000
 3500
 4000
 4500
 RONALD J. SAVOY
 0000 NO. 6636
 REGISTERED
 PROFESSIONAL
 ENGINEER
 IN
 CIVIL ENGINEERING

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BEST AVAILABLE COPY



TEJAS
INSTRUMENT ENGINEERS
HOUSTON, TEXAS 77001

FABRICATION
6" TIE-IN PRE-TEST

METER NUMBER W. CAMERON TUBE & DRIF. SIZE
71-12

TIME PUT ON
9:10 A.M.
DATE PUT ON
4/18/78

TIME TAKEN OFF
7:45 A.M.
DATE TAKEN OFF
4/19/78

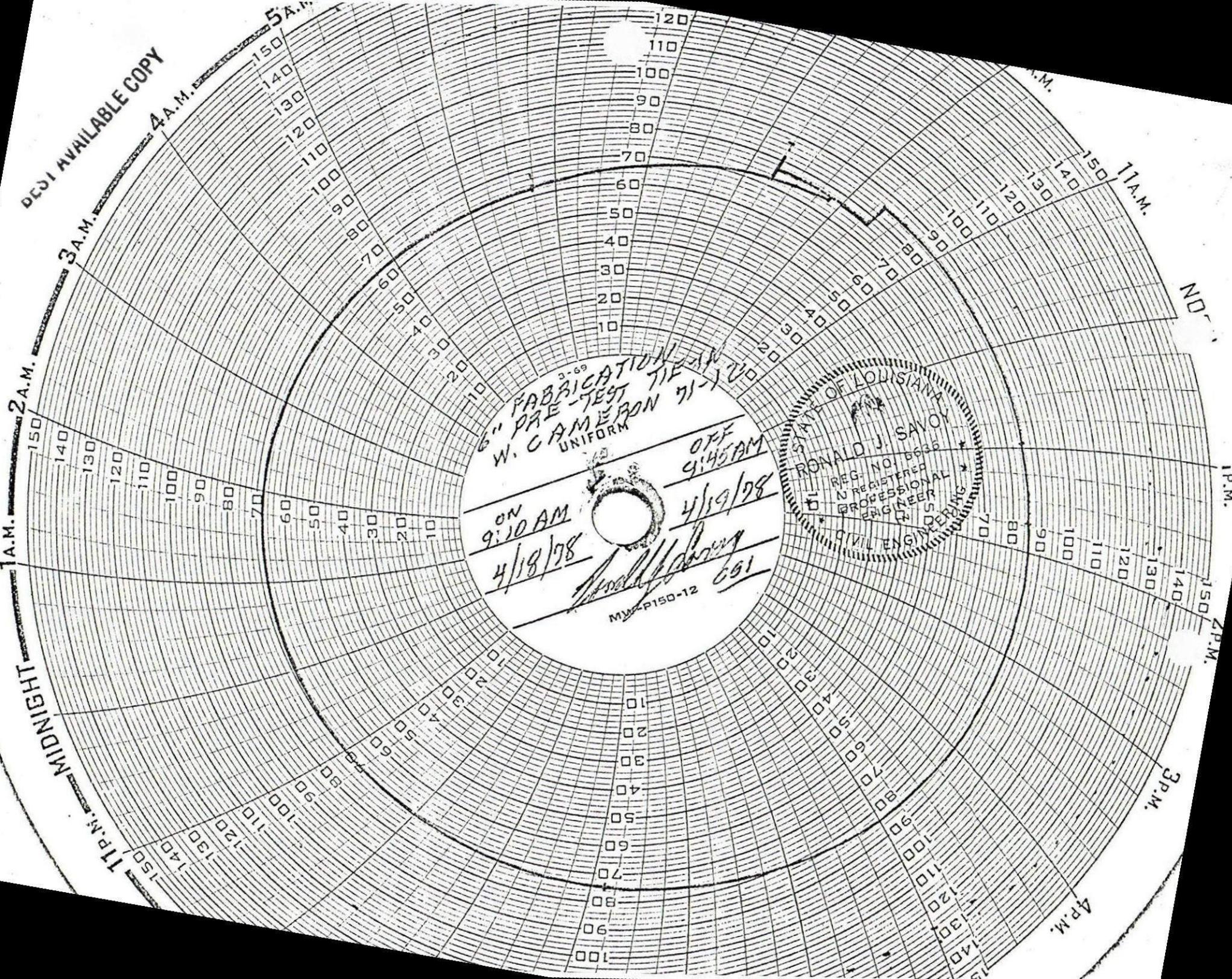
MW-MP 5000

SIGNED *[Signature]*
651

STATE OF LOUISIANA
1000
1500
2000
2500
3000
3500
4000
4500
RONALD J. SAVOY
REG. NO. 6636
REGISTERED
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING

STATE OF LOUISIANA
1500
2000
2500
3000
3500
RONALD J. SAVOY
0008, NO. 6636
REGISTERED
PROFESSIONAL
ENGINEER
IN
CIVIL ENGINEERING

DESIGN AVAILABLE COPY



3-69
 FABRICATION TIE-
 6" PRE-TEST TIE-
 W. CAMERON 71-120
 UNIFORM

ON 9:10 AM
 4/18/98
 OFF 9:45 AM
 4/19/98
 [Signature]
 691
 MW-P150-12

STATE OF LOUISIANA
 RONALD J. SAVOY
 REG. NO. 6636
 REGISTERED PROFESSIONAL ENGINEER
 CIVIL ENGINEERING

MIDNIGHT

1 A.M.

2 A.M.

3 A.M.

4 A.M.

5 A.M.

6 A.M.

7 A.M.

8 A.M.

9 A.M.

10 A.M.

11 A.M.

12 P.M.

1 P.M.

2 P.M.

3 P.M.

4 P.M.

NO.

1 P.M.

2 P.M.

3 P.M.

4 P.M.

PRESSURE TEST REPORT
AMERICAN NATURAL SERVICE COMPA

- Michigan Wisconsin Pipe Line Company
- Michigan Consolidated Gas Company
- Great Lakes Gas Transmission Company

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Report No. 3
Sheet 1 of 2

Project Name: 8" Riser Assembly for West Cameron 71-12 Design Pressure: 2000 PSIG

State: Louisiana County: Lafayette

Job No.: H-2159B Work Order No.: 4496

Construction Contractor: Oceaneering

Testing Contractor: Melbar Hydrostatic Testing Corporation

Test Medium: Water Gas Air Other _____

COMPLETE FOR PIPELINE TEST ONLY

Limits: M.P. _____ Station _____ + _____ to M.P. _____ Station _____ + _____

Pipe Specifications: _____ "O.D. X _____ "W.T. Grade _____ Manuf. _____

Gauge Point Pressure: Maximum _____ PSIG, Minimum _____ PSIG

Gauge Point Elevation: _____ Ft. Station _____ + _____

Low Point Pressure: _____ PSIG Elevation: _____ Ft.

High Point Pressure: _____ PSIG Elevation: _____ Ft.

Drawing No. _____

COMPLETE FOR ASSEMBLY TEST ONLY

Test Pressure: Maximum 4000 PSIG, Minimum: 3800 PSIG

Description of Assembly—Including Related Drawing Numbers: 5' of extra 8" x .500 wall grade "B" pipe for add on to riser assembly on Superior Oil's Platform 71-12 in West Cameron 71. Drw. #M(LA)D0901 Sheet 1 of 2.

TESTING EQUIPMENT

Pressure Pump: Make: Hand Pump Serial No.: _____ Capacity: _____ Gals/Stroke

Deadweight Gauge: Make: Chandler Serial No.: 6106

Pressure Recorder: Make: Foxboro Serial No.: 1388955

Temperature Recorder: Make: Foxboro Serial No.: 3364143

EADWEIGHT READINGS (PSIG)

Date Test On August 28, 1978 08:00 hrs.				Date Test Off August 29, 1978 08:10 hrs.			
ME P.M.	PRESSURE PSIG	TEMP °F AMB. PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP. °F AMB. PIPE	REMARKS
07:15	Started	filling pipe	with H ₂ O	14:00	3850	74 75	
07:45	Started	Pressuring		14:30	3850	75 76	
08:00	3939	74 78		15:00	3850	74 76	
08:15	3921	74 78	*Started to take up to	15:30	3850	74 76	
08:25	4000	74 78	max. pressure	16:00	3850	74 75	
08:45	3977	74 78		16:30	3850	74 75	
09:00	3967	74 78		17:00	3850	76 75	
09:15	3960	75 78		17:30	3850	76 76	
09:30	3951	75 78		18:00	3850	76 76	
10:00	3934	74 78		18:30	3850	76 76	
10:30	3924	74 78		19:00	3850	77 76	
11:00	3909	74 77		19:30	3850	77 76	
30	3897	75 75		20:00	3851	77 77	
12:00	3885	74 75		20:30	3852	77 77	
12:30	3875	75 75		21:00	3852	77 77	
13:00	3866	74 75		21:30	3851	77 77	
13:30	3856	74 75		22:00	3850	77 77	

Indicators: * Repressure • Bleed

For Additional Readings Use New Form

Comments: This test was conducted inside an office building and was under visual inspection during the test.

BEST AVAILABLE COPY

Weather Conditions: Stormy and wet.

Tenness (Company Representative): G. F. Black Date: 8-29-78

Contractor Representative: for Oceanicring of Thomas Radt Date: 9/6/78

Reviewed by: Scott Davis Date: 8/3/78

Approved by: H. E. Beaker Date: 8-3/78

EADWEIGHT READINGS (PSIG)

Date Test On				Date Test Off			
TIME P.M.	PRESSURE PSIG	TEMP °F AMB. PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP. °F AMB. PIPE	REMARKS
22:30	3849	76 77		07:30	3865	78 78	
23:00	3849	76 77		08:00	3862	78 78	
Mid-night							
24:00	3850	77 78		08:10	3862	78 78	Test completed De-Pressuring
24:30	3852	79 78					
01:00	3853	79 78					
01:30	3853	79 79					
02:00	3855	80 80					
02:30	3858	81 80					
03:00	3860	80 81					
03:30	3862	80 81					
04:00	3865	80 82					
04:30	3870	81 82					
05:00	3872	78 81					
05:30	3870	78 80					
06:00	3870	78 80					
06:30	3868	77 79					
07:00	3867	77 78					

Indicators: * Repressure • Bleed

For Additional Readings Use New Form

Comments: See Sheet #1

BEST AVAILABLE COPY

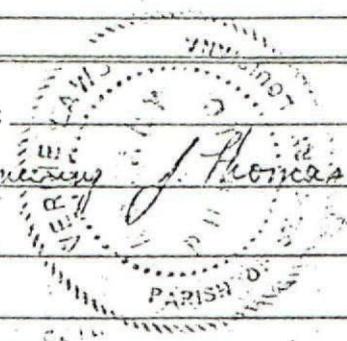
Weather Conditions: _____

Witness (Company Representative): _____ Date: _____

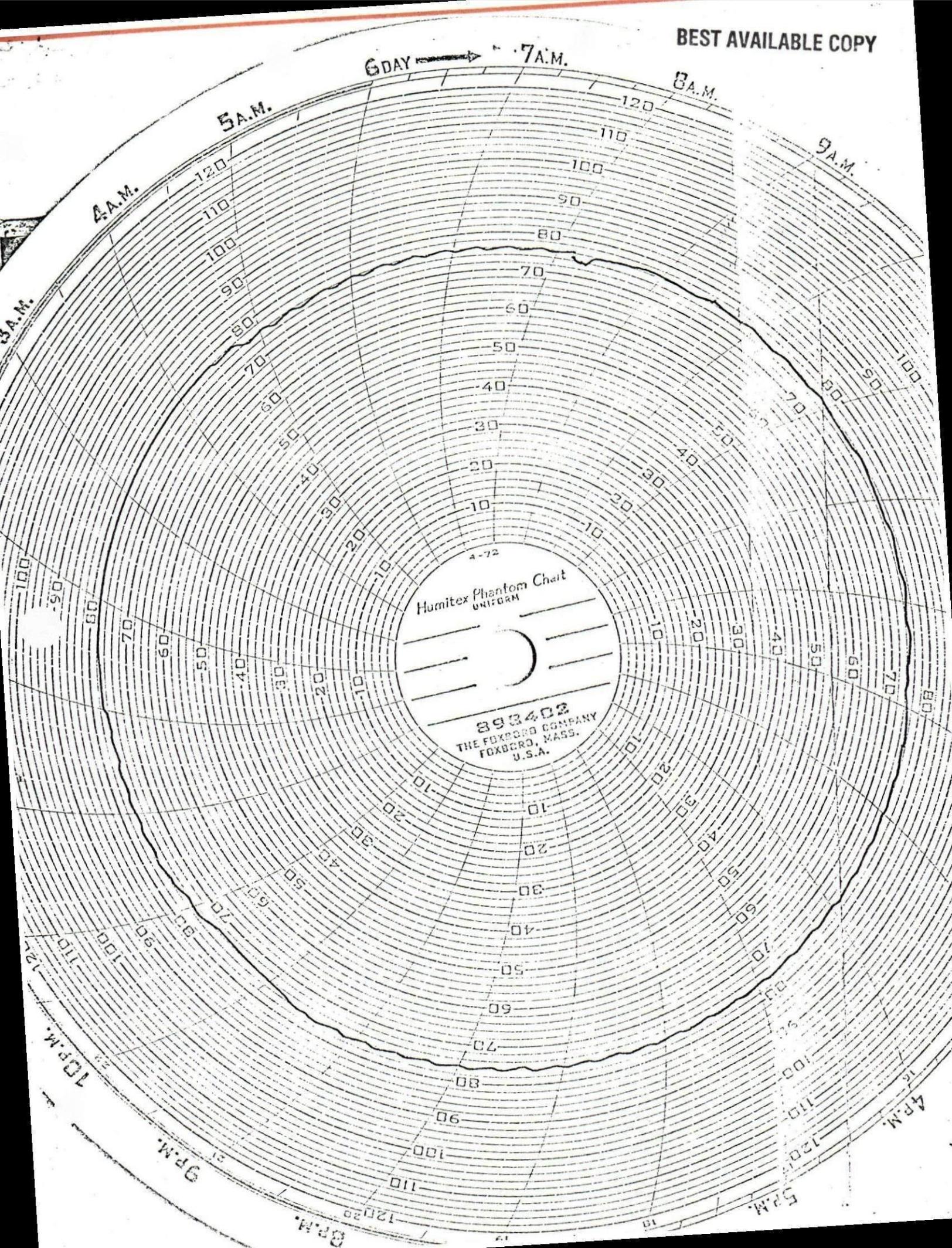
Contractor Representative: *J. Thomas Rade* _____ Date: 9/6/78

Reviewed by: _____ Date: _____

Approved by: _____ Date: _____



BEST AVAILABLE COPY



6 DAY → 7 A.M.

8 A.M.

9 A.M.

4 A.M.

5 A.M.

3 A.M.

Humitex Phantom Chart
UNIFORM

893402
THE FOXBORO COMPANY
FOXBORO, MASS.
U.S.A.

4-72

9 P.M.

8 P.M.

5 P.M.

4 P.M.

12 P.M.

110

100

90

80

70

60

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120

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PRESSURE TEST REPORT
AMERICAN NATURAL SERVICE COMP.

- Michigan Wisconsin Pipe Line Company
- Michigan Consolidated Gas Company
- Great Lakes Gas Transmission Company

Report No. 4
Sheet 1 of 2

Project Name: 8" Pipeline & Riser Assembly Design Pressure: 2000 PSIG

State: West Cameron Blk. 71 County: Superior Oil Co. Platform 71-12

Job No.: H-2159-B Work Order No.: 4496

Construction Contractor: Oceaneering

Testing Contractor: Milbar

Test Medium: Water Gas Air Other _____

COMPLETE FOR PIPELINE TEST ONLY

Limits: M.P. _____ Station 0 + 00 to M.P. _____ Station 4 + 43

Pipe Specifications: 8 5/8 "O.D. X .500 "W.T. Grade B Manuf. _____

Gauge Point Pressure: Maximum 3845 PSIG, Minimum 3820 PSIG

Gauge Point Elevation: + 24 Ft. Station _____ + _____

Low Point Pressure: 3855 PSIG Elevation: + 0 MSL Ft.

High Point Pressure: 3837 PSIG Elevation: 40 Ft.

Drawing No. 615-32-1

COMPLETE FOR ASSEMBLY TEST ONLY

Test Pressure: Maximum 3855 PSIG, Minimum: 3850 PSIG

Description of Assembly-Including Related Drawing Numbers: 8" Riser Assembly M(LA)-DG-901 Sheet 1 of 2

Plus 3 extra joints for pipeline repair to West Cameron 71-7 to 71-14

BEST AVAILABLE COPY

TESTING EQUIPMENT

Pressure Pump: Make: Sprag Serial No.: n/a Capacity: .0033 Gals/Stroke

Deadweight Gauge: Make: Chandler Serial No.: 6106

Pressure Recorder: Make: Foxboro Serial No.: 1388955

Temperature Recorder: Make: Foxboro Serial No.: 3364143

WEIGHT READINGS (PSIG)

Date Test On 9/11/78

Date Test Off 9/12/78

TIME P.M.	PRESSURE PSIG	TEMP °F AMB. PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP. °F AMB. PIPE	REMARKS
1500 HR	3845	84		2030 HR	3844.3	82	
1515	3844.4	84		2100 HR	3843.7	82	
1530	3843.5	84		2130	3843.0	82	
1545	3841.3	84		2200	3842.4	82	
1555	3840.5	84	* 3845	2230	3841.5	82	
1600	3845	84		2300	3840.5	82	
1615	3844	84		2315	3840.2	82	* 3845
1630				2330	3844.5	82	
1705	3845	83	*	2400	3844.5	82	
1715	3845	83		0030	3844.6	83	
1730	3845	83		0100	3844.6	83	
1800	3844.6	83		0130	3845	83	
1815	3844	82		0200	3845	83	
1830	3843.3	82		0230	3845	83	
1900	3842.0	82		0300	3845	83	
1930	3841.2	82		0330	3845	83	
2000	3840.3	82	* 3845	0400	3845	82	

Indicators: * Repressure • Bleed

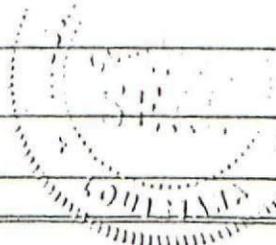
For Additional Readings Use New Form

Comments: 1630 HR - Test Manifold Leaking - Bled off for repair; 1705 HR Pressured back up and resume testing; 0900 HR - Leak at valve stem on test manifold; 1315 HR - Leaking back through test pump was discovered at this time. No check valve in line as required.

Weather Conditions: _____

BEST AVAILABLE COPY

Witness (Company Representative): George Black Date: 9/12/78
 Contractor Representative: Pat Barnwood Date: 9-12-78
 Reviewed by: Scott Davis Date: 1-23-79
 Approved by: [Signature] Date: 1-23-79



DEADWEIGHT READINGS (PSIG)

Report No. _____

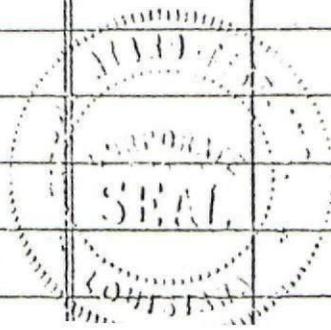
Test On **9/11/78**

Date Test Off **9/12/78**

Sheet **2** Of **2**

TIME A.M. P.M.	PRESSURE PSIG	TEMP °F AMB. PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP °F AMB. PIPE	REMARKS
0430	3844.5	82		1430	3840.2	84	
0500	3844	82		1500	3840.2	83	
0530	3844	82		1530	3840.2	84	
0600	3844	82		1600	3840.2	84	
0630	3843.1	82		1630	3840.2	84	
0700	3841.5	82		1700	3840.2	84	
0730	3840.5	82		1730	3840.2	84	
0800	3837.3	82		1800	3840.2	84	
0810	3835	82	* 3844	1830	3840.2	84	
0830	3841.6	82		1900	3840.2	84	
0840	3840	82	* 3845	1930	3840.2	84	End Test
0900	3842	82	Leak at valve stem on test manifold				
0920	3837	83	* 3845				
0930	3844	83					
0940	3840.2	83	* 3845				
1000	3845	83					
1030	3840.8	84					
1035	3840.2	84	* 3845				
1100	3840.6	83	* 3845				
1130	3840	82					
1200	3834	83					
1230	3827	84					
1300	3821.5	84					
1310	3820	84	* 3845				
1315			Remarks				
1330	3840.2	84					
1400	3840.2	84					

BEST AVAILABLE COPY



BEST AVAILABLE COPY
3 A.M.

2 A.M.

1 A.M.

PHOTO

11 P.M.

10 P.M.

9 P.M.

9 A.M.

10 A.M.

11 A.M.

NOON

1 P.M.

2 P.M.

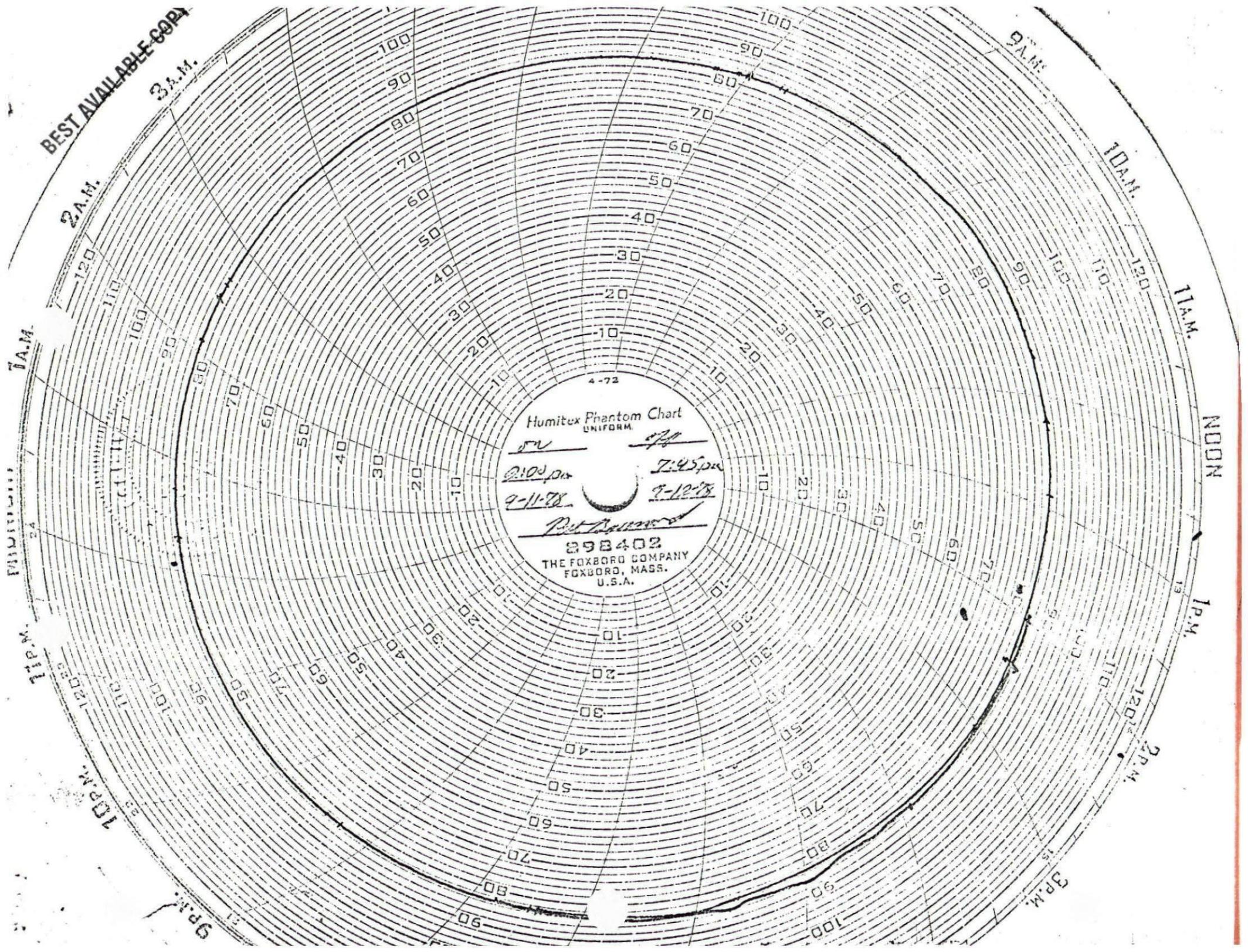
3 P.M.

4-72

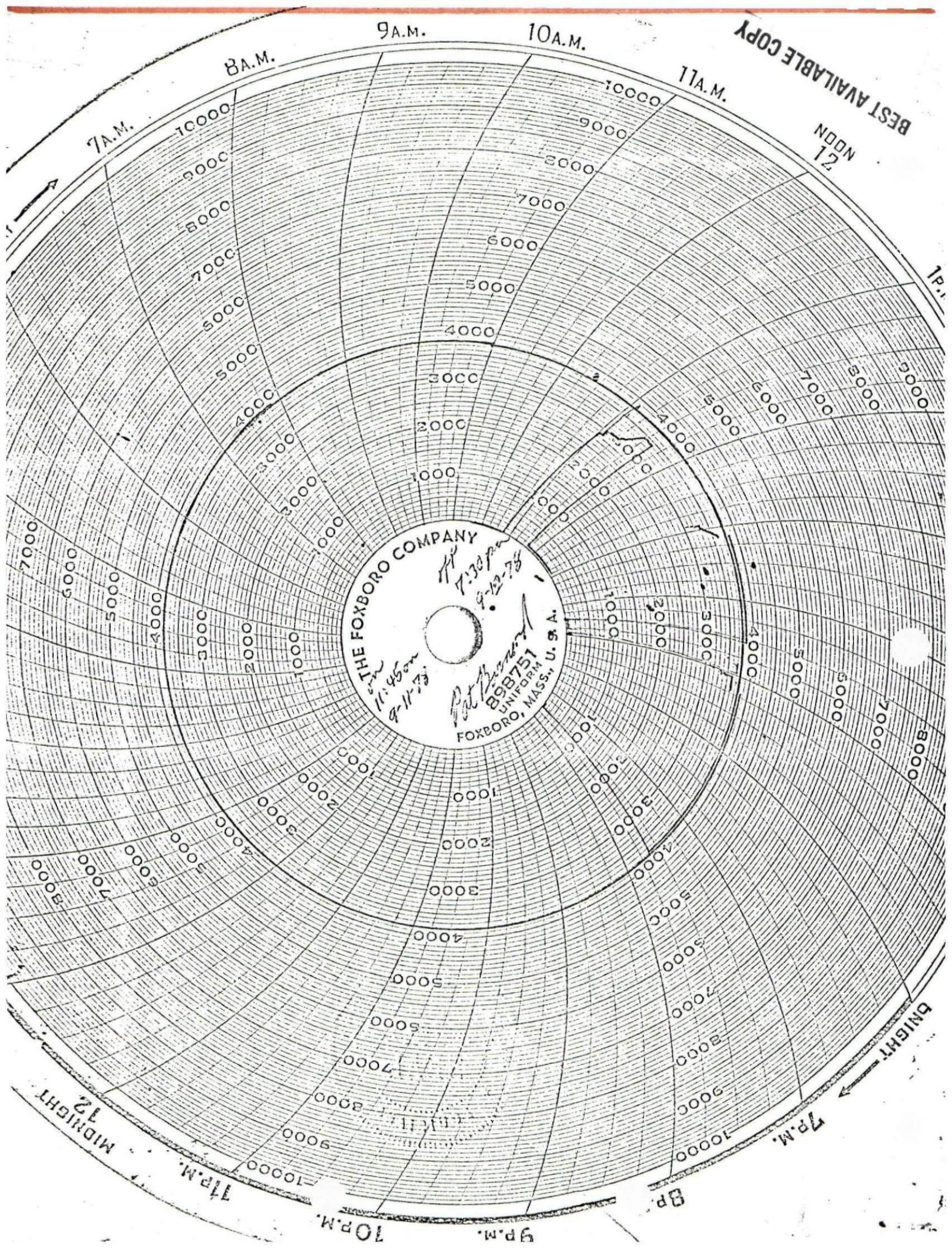
Humitex Phantom Chart
UNIFORM

5V *470*
2:10 pm *7:45 pm*
9-11-78 *9-12-78*

Pat. [Signature]
298402
THE FOXBORO COMPANY
FOXBORO, MASS.
U.S.A.



BEST AVAILABLE COPY



THE FOXBORO COMPANY
UNIFORM 898751
FOXBORO, MASS., U.S.A.

11:45 am
9-11-73
7:30 pm
9-12-73
Pat. [signature]

PRESSURE TEST REPORT
AMERICAN NATURAL SERVICE COMPANY

- Michigan Wisconsin Pipe Line Company
- Michigan Consolidated Gas Company
- Great Lakes Gas Transmission Company

Report No. 05-1
Sheet 1 Of 2

Project Name: Block 71-7 to Block 71-14 W. Cameron Design Pressure: 2000 PSIG

State: Louisiana County: Outer Continental Shelf

Job No.: H-2066-B Work Order No.: 4469

Construction Contractor: Norman Industries, Inc.

Testing Contractor: Norman Industries, Inc.

Test Medium: Water Gas Air Other

COMPLETE FOR PIPELINE TEST ONLY

Limits: M.P. _____ Station _____ + _____ to M.P. _____ Station _____ + _____

Pipe Specifications: _____ "O.D. X _____ "W.T. Grade _____ Manuf. _____

Gauge Point Pressure: Maximum _____ PSIG, Minimum _____ PSIG

Gauge Point Elevation: _____ Ft. Station _____ + _____

Low Point Pressure: _____ PSIG Elevation: _____ Ft.

High Point Pressure: _____ PSIG Elevation: _____ Ft.

Drawing No. _____

COMPLETE FOR ASSEMBLY TEST ONLY

Test Pressure: Maximum 4000 PSIG, Minimum: 3800 PSIG

Description of Assembly-Including Related Drawing Numbers: Blk. 71-7 Riser 8" - Drawing No. M(LA)-DC-901
Sheet 1 of 2; Blk. 71-14 Riser 8" - Drawing No. M(LA)-DD-901 Sheet 1 of 2, plus 6" Tap
to Platform 71-12 Block 71, West Cameron - Drawing #AI-PI-01-A-126.

BEST AVAILABLE COPY

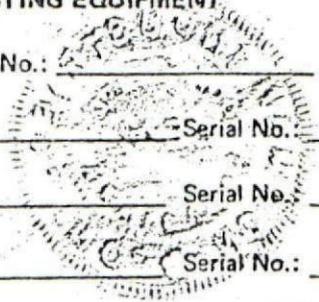
TESTING EQUIPMENT

Pressure Pump: Make: _____ Serial No.: _____ Capacity: _____ Gals/Stroke

Deadweight Gauge: Make: Chandler Eng. Co. Serial No.: 12819

Pressure Recorder: Make: Barton Serial No.: 242A-4981

Temperature Recorder: Make: Barton Serial No.: 242A-4719



DEADWEIGHT READINGS (P)

Date Test On 5-12-77				Date Test Off 5-13-77			
TIME A.M. P.M.	PRESSURE PSIG	TEMP °F AMB. PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP °F AMB. PIPE	REMARKS
5:45 PM	3970	86	Start Test	6:00	3830	64	
6:00	3950	84	Clear	6:15	3815	64	* to 4000
7:00	3860	83	Clear	7:00	3970	64	
7:50	3815	76	* to 3999	8:00	3950	68	
8:00	3999	76	Clear	8:50	4000	75	• to 3850
9:00	3880	73	Clear	10:00	3930	77	
9:30	3815	72	* to 4000	10:30	4000	79	• to 3825
10:00	3950	72		11:00	3910	80	
10:45	3860	70	* to 4000	11:40	4000	83	• to 3820
11:00	3970	70		12:00	3867	84	
12:00	3960	69		12:30	4000	85	• to 3810
1:00 AM	3900	68		1:00 PM	3920	85	Clear
2:00	3850	67					Partly Cloudy
2:30	3815	66	* to 4000	1:30	4000	85	• to 3800
3:00	3980	65		2:30	3970	85	• to 3810
4:00	3930	65		3:30	3880	86	
5:00	3870			4:30	3948	85	

Indicators: * Repressure • Bleed

For Additional Readings Use New Form

Comments: _____

BEST AVAILABLE COPY

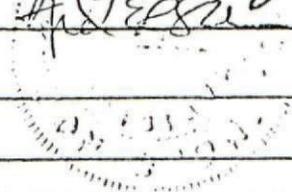
Weather Conditions: _____

Test Witness (Company Representative): *L. J. Taylor* Date: 5-13-77

Contractor Representative: *Andy Anderson* Date: 7-6-78

Reviewed by: _____ Date: _____

Approved by: _____ Date: _____



BEST AVAILABLE COPY

6 A.M.
5 A.M.

4 A.M.

3 A.M.

2 A.M.

1 A.M.

8 A.M.

3 P.M.

4 P.

7 P.M.

8 P.M.

6 P.

TEJAS

INSTRUMENT ENGINEERS
HOUSTON, TEXAS 77001

71-7 to 71-14
RIGERS

METER NUMBER

TUBE & CRIF. SIZE

TIME PUT ON

TIME TAKEN OFF

5:45 P.M.

5:45 P.M.

DATE PUT ON

DATE TAKEN OFF

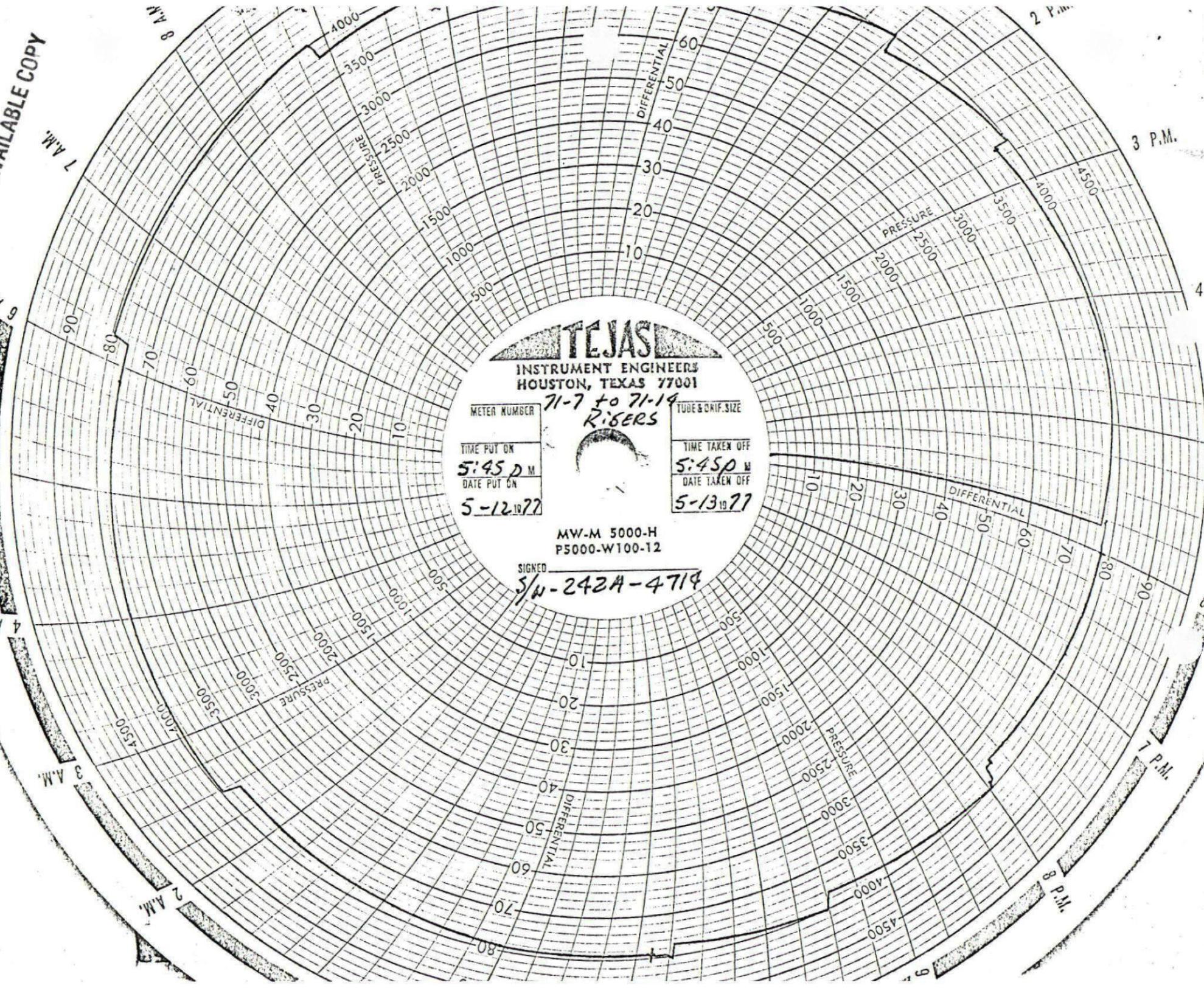
5-12-77

5-13-77

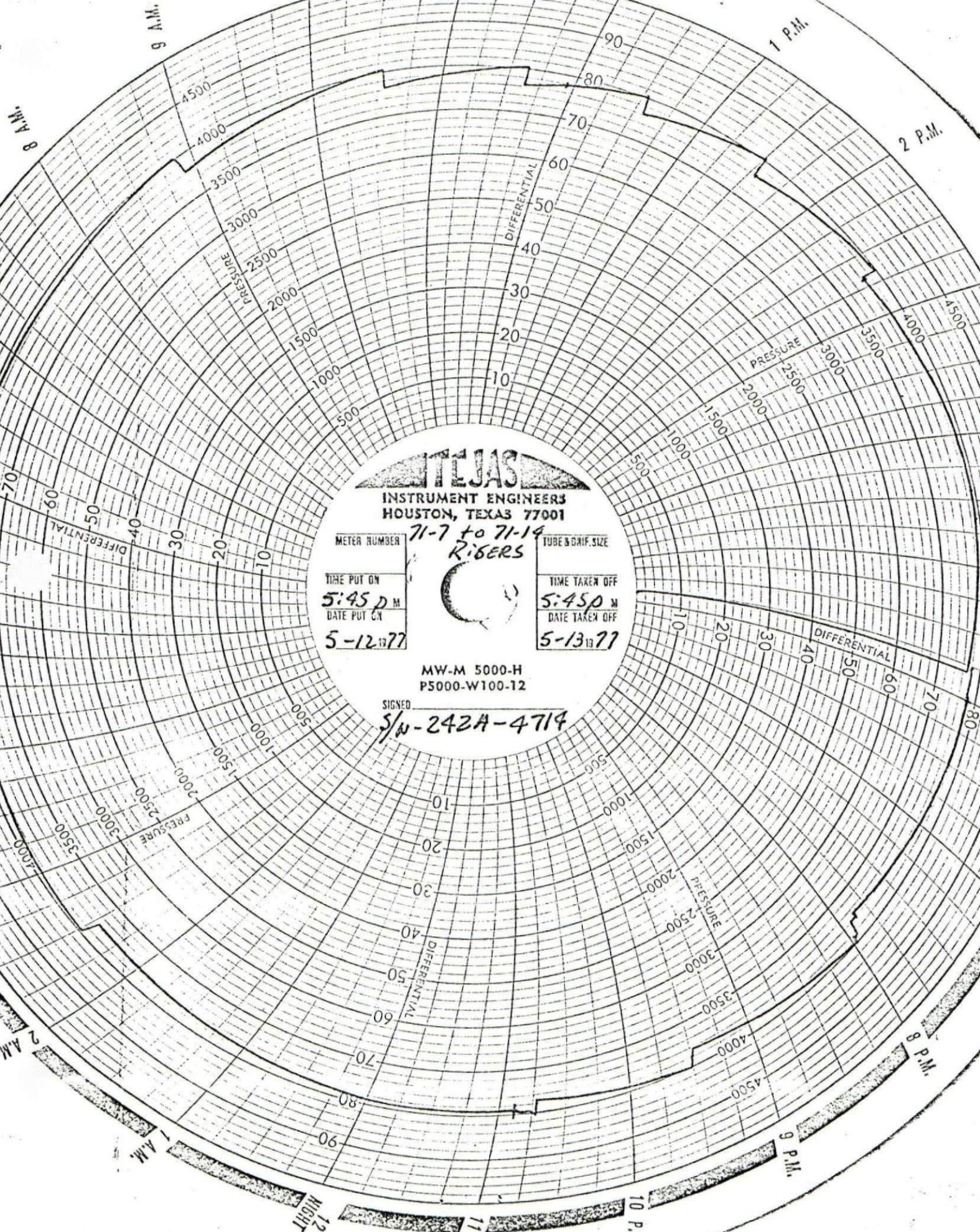
MW-M 5000-H
P5000-W100-12

SIGNED

S/M-242A-4714



BEST AVAILABLE COPY



INSTRUMENT ENGINEERS
HOUSTON, TEXAS 77001

71-7 to 71-14
RIGERS

METER NUMBER

TUBE & ORIF. SIZE

TIME PUT ON

TIME TAKEN OFF

5:45 P.M.

5:45 P.M.

DATE PUT ON

DATE TAKEN OFF

5-12-77

5-13-77

MW-M 5000-H
P5000-W100-12

SIGNED

S/N-242A-4714

ATLAS
INSTRUMENT ENGINEERS
HOUSTON, TEXAS 77001

ON 5:45P M

OFF 5:45P M

5-12-1977

5-13-1977

LOCATION Block 71-7 to 71-14

REMARKS S/N-242A-4981

RISERS.

TIE MP-150

PRESSURE TEST REPORT
AMERICAN NATURAL SERVICE COMP

- Michigan Wisconsin Pipe Line Company
 Michigan Consolidated Gas Company
 Great Lakes Gas Transmission Company

Report No. 65-2
Sheet 1 of 2

Project Name: Blocks 71-7 to 71-14 Design Pressure: 2000 PSIG
State: Louisiana - West Cameron Area County: Outer Continental Shelf
Job No.: H-2066-B Work Order No.: 4469
Construction Contractor: Norman Industries, Inc.
Testing Contractor: Norman Industries, Inc.
Test Medium: [X] Water [] Gas [] Air [] Other

COMPLETE FOR PIPELINE TEST ONLY

Limits: M.P. Station + to M.P. Station +
Pipe Specifications: "O.D. X "W.T. Grade Manuf.
Gauge Point Pressure: Maximum PSIG, Minimum PSIG
Gauge Point Elevation: Ft. Station +
Low Point Pressure: PSIG Elevation: Ft.
High Point Pressure: PSIG Elevation: Ft.
Drawing No. M(LA)DC-901 Sheet 1 of 2

COMPLETE FOR ASSEMBLY TEST ONLY

Test Pressure: Maximum 4000 PSIG, Minimum: 3800 PSIG
Description of Assembly-Including Related Drawing Numbers: Retest of 71-7 Riser which was buckled during installation, Drawing No. M(LA)DC-901, Sheet 1 of 2, Riser assembly.

BEST AVAILABLE COPY

TESTING EQUIPMENT

Pressure Pump: Make: Serial No.: Capacity: Gals/Stroke
Deadweight Gauge: Make: Chandler Engineering Co. Serial No.: 12819
Pressure Recorder: Make: Barton Serial No.: 242A-4714
Temperature Recorder: Make: Barton Serial No.: 242A-4785

DEADWEIGHT READINGS (PSIG)

 Date Test On 6-20-77

 Date Test Off 6-21-77

TIME A.M. P.M.	PRESSURE PSIG	TEMP °F AMB. PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP. °F AMB. PIPE	REMARKS
4:45 PM	3844	92	Start Test	3:10 AM	3829	70	* to 3990
4:55	3880	90	• to 3850	4:00	3932	70	
5:40	3990	87	to 3810	5:00	3870	69	
6:00	3850	86		6:00	3834	68	
7:00	3910	84		6:15	3820	68	* to 3905
8:00	3870	78		7:00	3879	70	
8:30	3820	77	* to 3985	8:00	3870	76	
9:00	3930	76		9:00	3924	84	
9:50	3820	74	* to 4000	9:30	3990	86	• to 3800
10:00	3990	74		10:00	3872	90	
11:00	3879	74		10:40	3990	92	• to 3815
11:30	3820	73	* to 3980	11:00	3890	93	
12:00	3936	73		11:30	3995	93	• to 3805
1:00 AM	3830	72		12:00	3926	92	
1:10	3820	72	* to 3965	12:20	3990	94	• to 3824
2:00	3900	72		1:00 AM	3940	92	
3:00	3830	70		1:20	3990	92	

Indicators: • Repressure • Bleed

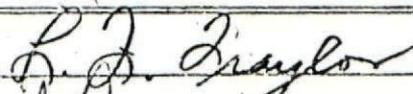
For Additional Readings Use New Form

Comments: _____

BEST AVAILABLE COPY

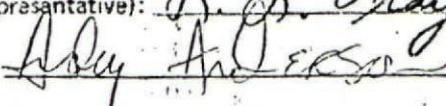
Weather Conditions: _____

Test Witness (Company Representative):



 Date: 6-21-77

Contractor Representative:



 Date: 7-6-78

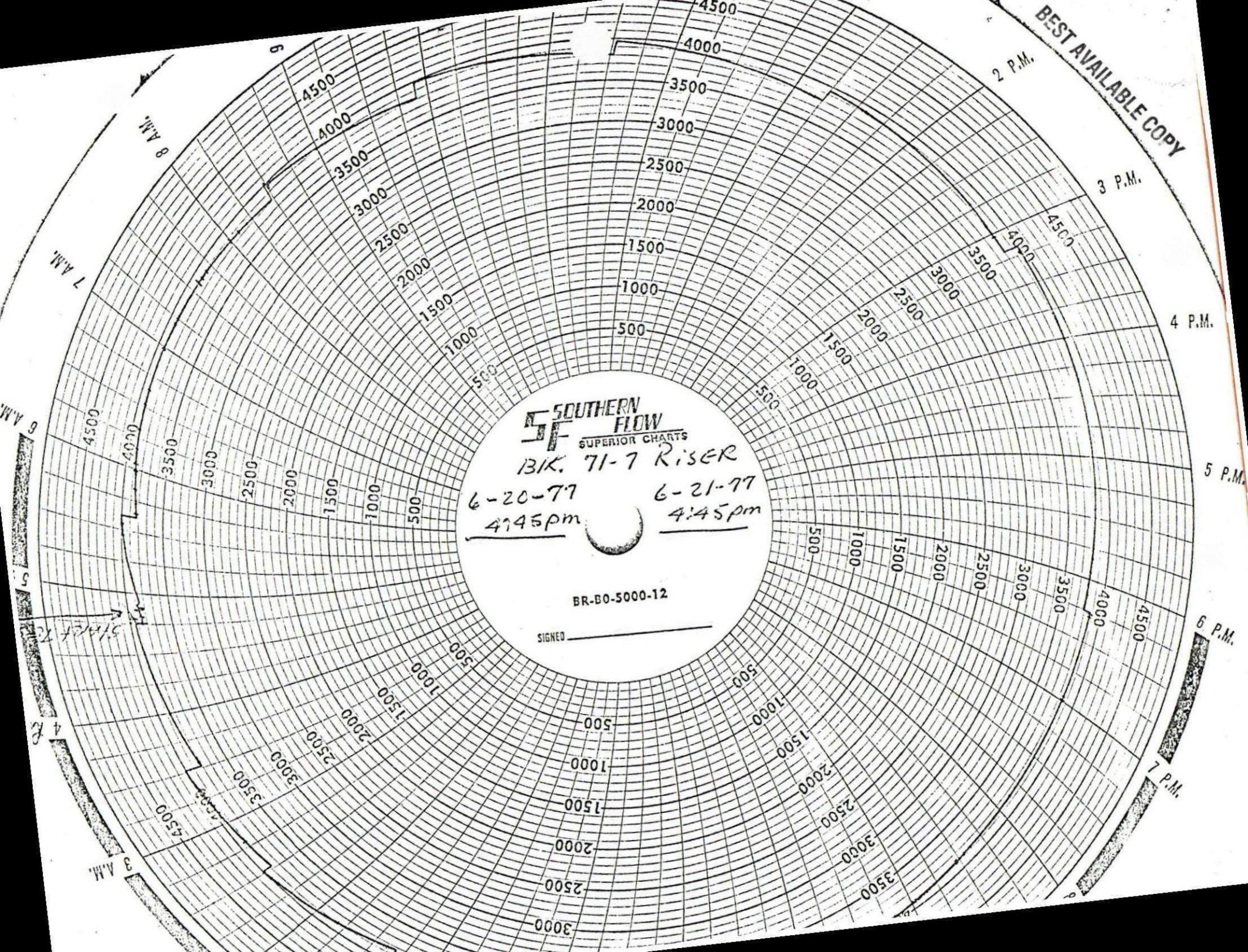
Reviewed by: _____

Date: _____

Approved by: _____

Date: _____

BEST AVAILABLE COPY



SF SOUTHERN FLOW
SUPERIOR CHARTS

BIK. 71-7 RISER

6-20-77

6-21-77

4:45pm

4:45pm

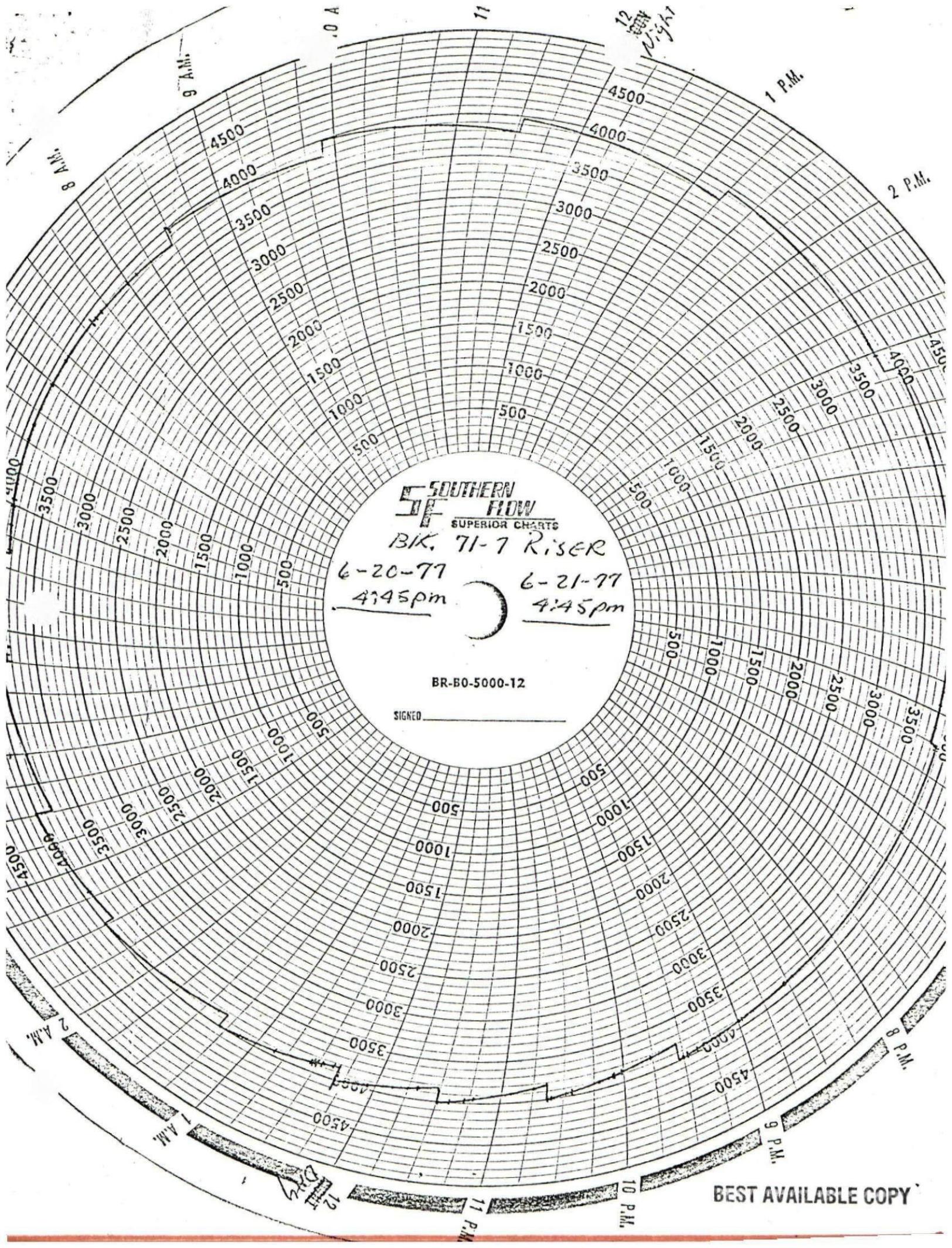
BR-B0-5000-12

SIGNED _____

9 AM
8 AM
7 AM
6 AM
5 AM
4 AM
3 AM

2 P.M.
3 P.M.
4 P.M.
5 P.M.
6 P.M.
7 P.M.

START



SOUTHERN FLOW
SUPERIOR CHARTS

BK. 71-7 RISER

6-20-77

4:45pm

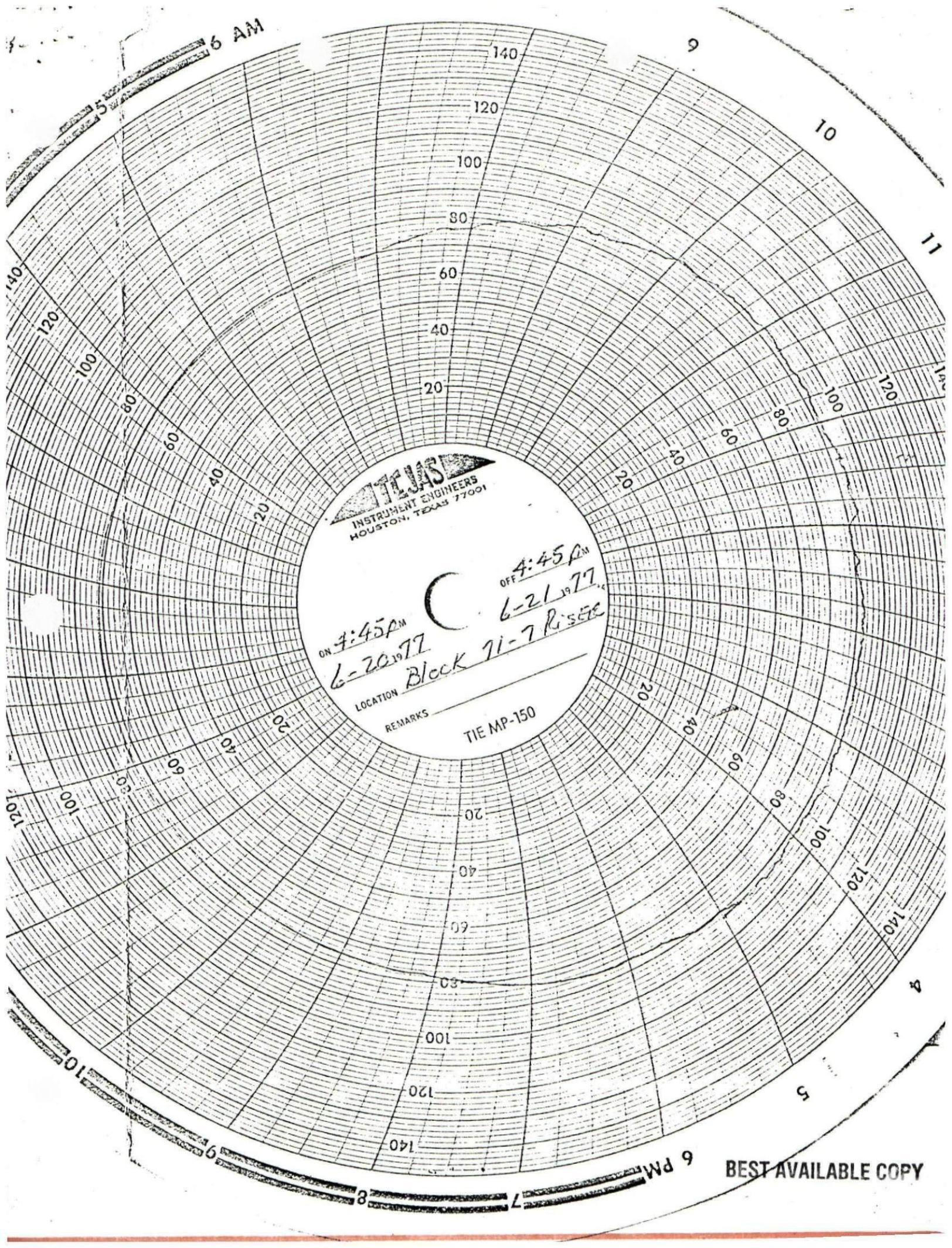
6-21-77

4:45pm

BR-B0-5000-12

SIGNED _____

BEST AVAILABLE COPY



6 AM

9

10

11

TEJAS
INSTRUMENT ENGINEERS
HOUSTON, TEXAS 77001



ON 4:45 PM
6-20-77

OFF 4:45 PM
6-21-77

LOCATION

Block 71-7 Rise

REMARKS
TIE MP-150

10

9

8

7

6 PM

BEST AVAILABLE COPY

PRESSURE TEST REPORT
AMERICAN NATURAL SERVICE COMPANY

- Michigan Wisconsin Pipe Line Company
- Michigan Consolidated Gas Company
- Great Lakes Gas Transmission Company

Report No. 65.3

Sheet 1 Of 1

Project Name: Block 71-7 to Block 71-14 Design Pressure: 2000 PSIG

State: Louisiana - W. Cameron County: Outer Continental Shelf

Job No.: H-2066-B Work Order No.: 4469

Construction Contractor: Norman Industries, Inc.

Testing Contractor: Norman Industries, Inc.

Test Medium: Water Gas Air Other

COMPLETE FOR PIPELINE TEST ONLY

Limits: M.P. 0.0 Station 0 + 00 to M.P. 1.31 Station 68 + 97.56

Pipe Specifications: 8-5/8 "O.D. X 0.500 "W.T. Grade "B" Manuf. Youngtown

Gauge Point Pressure: Maximum 3835 PSIG, Minimum 3825 PSIG

Gauge Point Elevation: 45' - 11-7/8" Ft. Station 0 + 00

Low Point Pressure: 3845 PSIG Elevation: 0' - 0" Mean Low Water Ft.

High Point Pressure: 3835 PSIG Elevation: 45' - 11-7/8" Ft.

Drawing No.

COMPLETE FOR ASSEMBLY TEST ONLY

Test Pressure: Maximum 3835 PSIG, Minimum: 3825 PSIG

Description of Assembly—Including Related Drawing Numbers:

BEST AVAILABLE COPY

TESTING EQUIPMENT

Pressure Pump: Make: _____ Serial No.: _____ Capacity: _____ Gals/Stroke

Deadweight Gauge: Make: Chandler Eng. Co. Serial No.: 12819

Pressure Recorder: Make: Barton Serial No.: 242A-4714

Temperature Recorder: Make: Barton Serial No.: 242A-4785

DEADWEIGHT READINGS (PSIG)

Date Test On

7-5-77

Date Test Off

-6-77

TIME A.M. P.M.	PRESSURE PSIG	TEMP °F AMB. PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP °F AMB. PIPE	REMARKS
5:00 AM	3835	70	Start Test	10:00	3835	80	
6:00	3828	71		11:00	3835	78	
7:30	3825	71	* to 3830	12:00	3835	78	
8:15	3825	73	* to 3835	1:00 AM	3835	76	
9:00	3833	73		2:00	3835	76	
10:00	3829	74		3:00	3835	73	
11:00	3829	75	Leak on Test Head	4:00	3835	75	
12:00	3828	78		5:00 AM	3835	73	End Test
1:00 PM	3828	80					Test Accepted
2:00	3828	83					
3:00	3828	85					
4:00	3828	86					
5:00	3837	86					
6:00	3827	86					
7:00	3826	85					
8:00	3826	83					
9:00	3826	81	* to 3835				

Indicators: • Repressure • Bleed

For Additional Readings Use New Form

Comments: _____

BEST AVAILABLE COPY

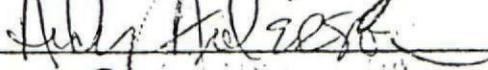
Weather Conditions: _____

Test Witness (Company Representative):



Date: _____

Contractor Representative:



Date: 7/6/78

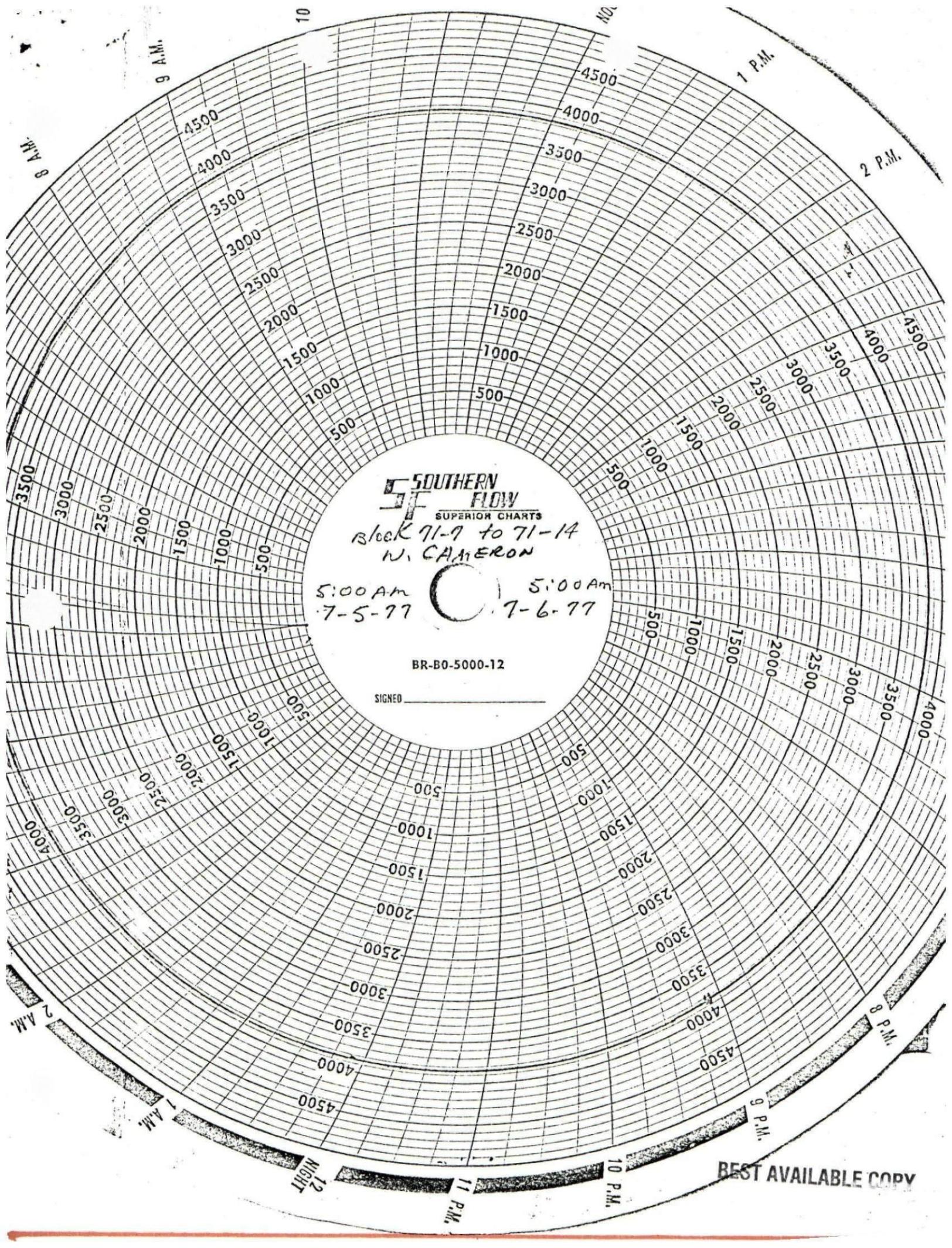
Reviewed by:



Date: 6/30/78

Approved by: _____

Date: _____



SOUTHERN FLOW
SUPERIOR CHARTS

Block 71-7 to 71-14
W. CAMERON

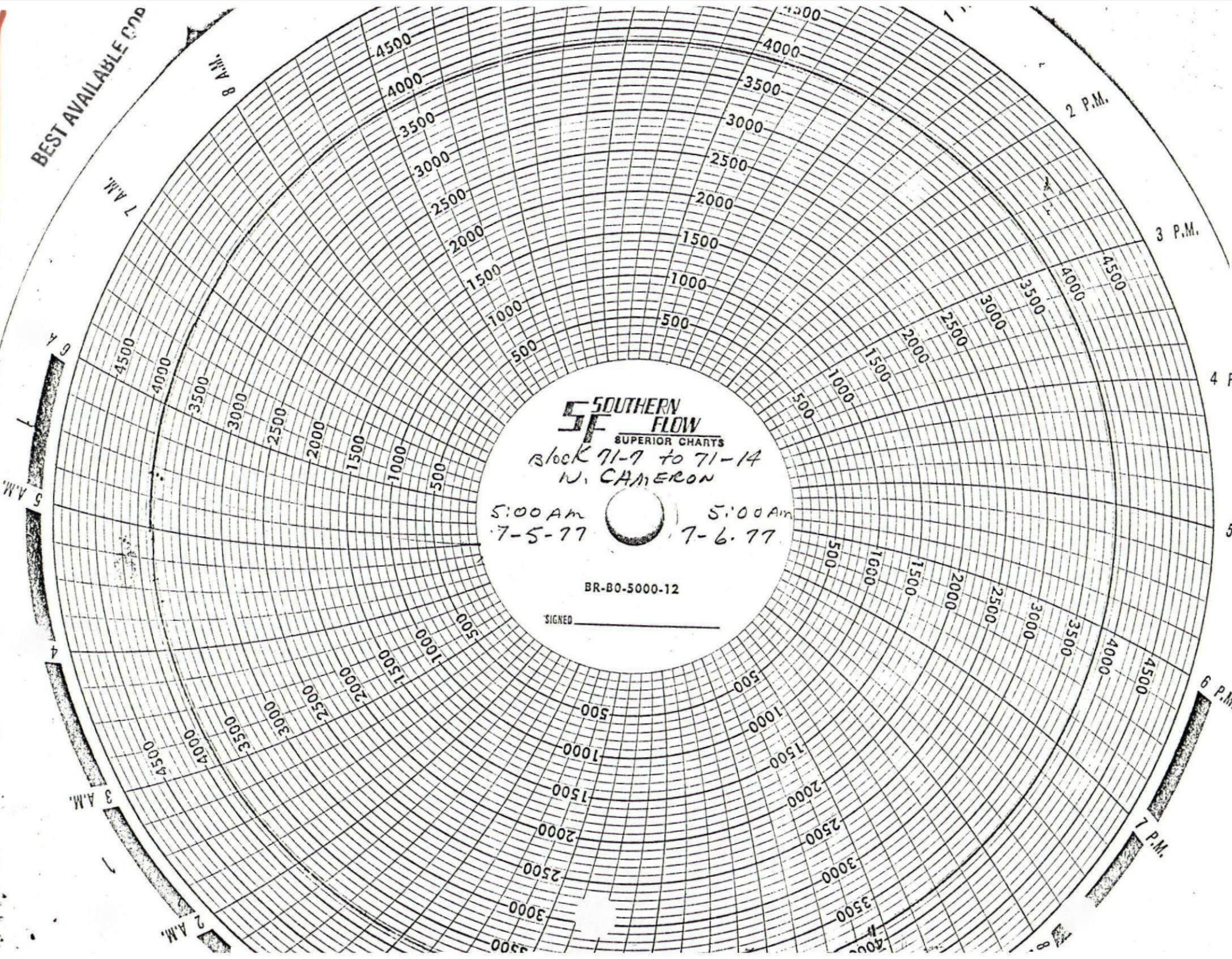
5:00 AM 7-5-77  5:00 AM 7-6-77

BR-B0-5000-12

SIGNED _____

BEST AVAILABLE COPY

BEST AVAILABLE COPY



SF SOUTHERN FLOW
SUPERIOR CHARTS

Block 71-7 to 71-14
W. CAMERON

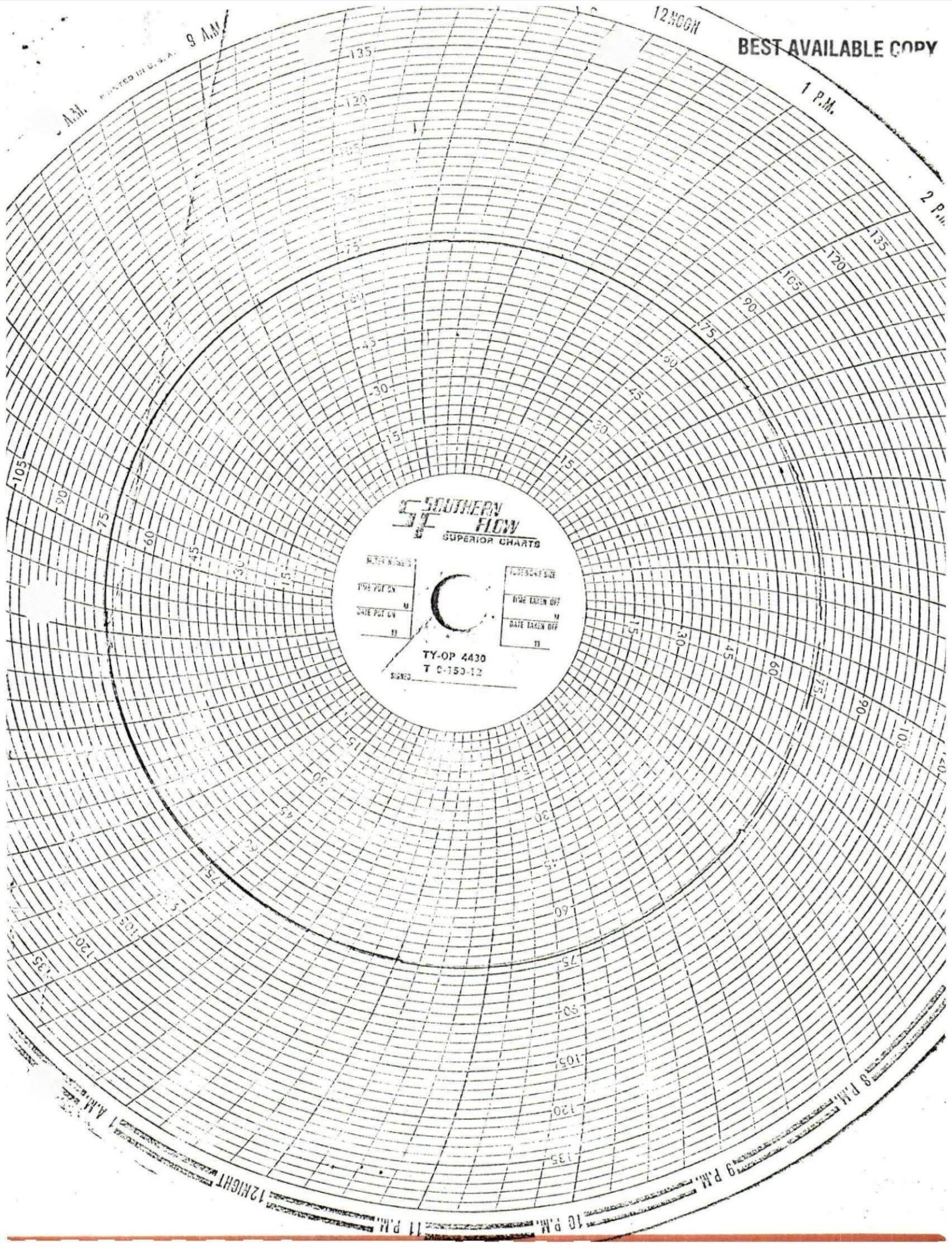
5:00 AM 7-5-77 5:00 AM 7-6-77

BR-80-5000-12

SIGNED _____

PRINTED IN U.S.A. 9 A.M.

BEST AVAILABLE COPY



SOUTHERN FLOW
SUPERIOR CHARTS

METER NUMBER
TYPE PUT ON
DATE PUT ON

TUBERCULE SIZE
TIME TAKEN OFF
DATE TAKEN OFF

TY-OP 4430
T C-153-12

SIGNED _____

PRESSURE TEST REPORT
AMERICAN NATURAL SERVICE COMP

- Michigan Wisconsin Pipe Line Company
- Michigan Consolidated Gas Company
- Great Lakes Gas Transmission Company

BEST AVAILABLE COPY

Report No. _____

Sheet 1 of 2

Project Name: 8" Pipeline & Riser Assembly Design Pressure: 2000 PSIG

State: West Cameron Blk. 71 County: Superior Oil Co. Platform 71-12

Job No.: H-2159-B Work Order No.: 4496

Construction Contractor: Oceaneering

Testing Contractor: Milbar

Test Medium: Water Gas Air Other _____

COMPLETE FOR PIPELINE TEST ONLY

Limits: M.P. _____ Station 0 + 00 to M.P. _____ Station 4 + 43

Pipe Specifications: 8 5/8 "O.D. X .500 "W.T. Grade B Manuf. _____

Gauge Point Pressure: Maximum 3845 PSIG, Minimum 3820 PSIG

Gauge Point Elevation: + 24 Ft. Station _____ + _____

Low Point Pressure: 3855 PSIG Elevation: + 0 MSL Ft.

High Point Pressure: 3837 PSIG Elevation: 40 Ft.

Drawing No. 615-32-1

COMPLETE FOR ASSEMBLY TEST ONLY

Test Pressure: Maximum 3855 PSIG, Minimum: 3850 PSIG

Description of Assembly—Including Related Drawing Numbers: 8" Riser Assembly M(LA)-DG-901 Sheet 1 of 2

(Plus 3 extra joints for pipeline repair to West Cameron 71-7 to 71-14)

ORIGINAL TEST IN BOOK # 78-8

CONSTRUCTION OF 8" PIPELINE BLOCK 71-12 W.C.

TESTING EQUIPMENT

Pressure Pump: Make: Sprag Serial No.: n/a Capacity: .0033 Gals/Stroke

Deadweight Gauge: Make: Chandler Serial No.: 6106

Pressure Recorder: Make: Foxboro Serial No.: 1388955

Temperature Recorder: Make: Foxboro Serial No.: 3364143

HEADWEIGHT READINGS (PSIG)

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Date Test On 9/11/78				Date Test Off 9/12/78			
TIME A.M. P.M.	PRESSURE PSIG	TEMP °F AMB. PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP °F AMB. PIPE	REMARKS
1500 HR	3845	84		2030 HR	3844.3	82	
1515	3844.4	84		2100 HR	3843.7	82	
1530	3843.5	84		2130	3843.0	82	
1545	3841.3	84		2200	3842.4	82	
1555	3840.5	84	* 3845	2230	3841.5	82	
1600	3845	84		2300	3840.5	82	
1615	3844	84		2315	3840.2	82	* 3845
1630				2330	3844.5	82	
1705	3845	83	*	2400	3844.5	82	
1715	3845	83		0030	3844.6	83	
1730	3845	83		0100	3844.6	83	
1745	3844.6	83		0130	3845	83	
1815	3844	82		0200	3845	83	
1830	3843.3	82		0230	3845	83	
1900	3842.0	82		0300	3845	83	
1930	3841.2	82		0330	3845	83	
2000	3840.3	82	* 3845	0400	3845	82	

Indicators: * Repressure • Bleed

For Additional Readings Use New Form

Comments: 1630 HR - Test Manifold Leaking - Bled off for repair; 1705 HR Pressured back up and resume testing; 0900 HR - Leak at valve stem on test manifold; 1315 HR - Leaking back through test pump was discovered at this time. No check valve in line as required.

Weather Conditions: _____

Witness (Company Representative): George F. Black Date: 9/12/78
 Contractor Representative: Pat Barnwood Date: 9-12-78
 Reviewed by: Scott Davis Date: 1-23-79
 Approved by: [Signature] Date: _____

DEADWEIGHT READINGS (PSIG)

Report No. _____

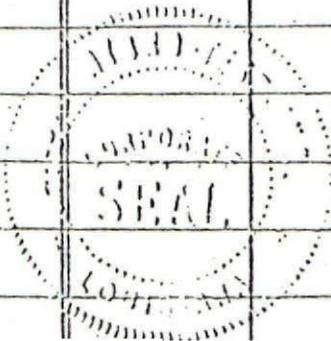
Date Test On 9/11/78

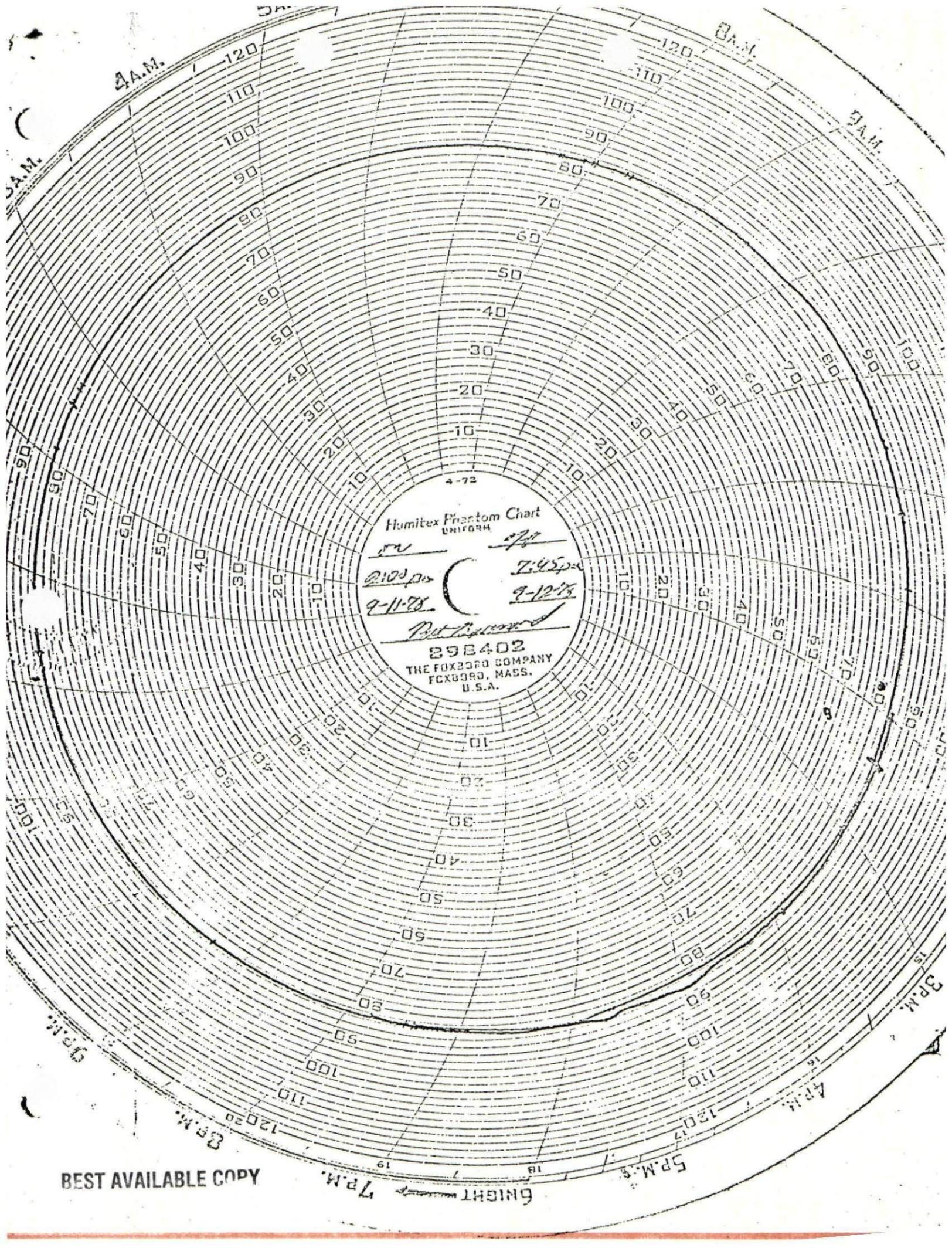
Date Test Off 9/12/78

Sheet 2 Of 2

TIME A.M. P.M.	PRESSURE PSIG	TEMP °F AMB. PIPE	REMARKS	TIME A.M. P.M.	PRESSURE PSIG	TEMP. °F AMB. PIPE	REMARKS
0430	3844.5	82		1430	3840.2	84	
0500	3844	82		1500	3840.2	83	
0530	3844	82		1530	3840.2	84	
0600	3844	82		1600	3840.2	84	
0630	3843.1	82		1630	3840.2	84	
0700	3841.5	82		1700	3840.2	84	
0730	3840.5	82		1730	3840.2	84	
0800	3837.3	82		1800	3840.2	84	
0810	3835	82	* 3844	1830	3840.2	84	
0830	3841.6	82		1900	3840.2	84	
0840	3840	82	* 3845	1930	3840.2	84	End Test
0900	3842	82	Leak at valve stem on test manifold				
0920	3837	83	* 3845				
0930	3844	83					
0940	3840.2	83	* 3845				
1000	3845	83					
1030	3840.8	84					
1035	3840.2	84	* 3845				
1100	3840.6	83	* 3845				
1130	3840	82					
1200	3834	83					
1230	3827	84					
1300	3821.5	84					
310	3820	84	* 3845				
1315			Remarks				
1330	3840.2	84					
1400	3840.2	84					

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Humitex Phantom Chart
UNIFORM

4-72

2:00 pm *7:45 pm*
9-11-78 *9-12-78*
Pat. [unclear]

898402
THE FOXBORO COMPANY
FOXBORO, MASS.
U.S.A.

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BRIGHT 7 P.M.

5 P.M.

Ford, Bacon & Davis Construction Corporation

NEW YORK

ACTING AS AGENT FOR
MICHIGAN WISCONSIN PIPE LINE COMPANY

MONROE

3901 JACKSON STREET
P. O. BOX 1762
MONROE, LOUISIANA 71201

September 10, 1978
Lafayette, Louisiana

Mr. Jesse Hunt
Bureau of Land Management
New Orleans Outer Continental Shelf Office
New Orleans, Louisiana

Re: Michigan Wisconsin Pipeline Company
OCS-G 3642; 8" P/L, West Cameron
Block 71-12
OCS-G 3654; 10" P/L, Ship Shoal
Block 219 - 291

Dear Mr. Hunt:

This letter confirms our telephone conversation of September 6, 1978, in which we discussed construction progress on the subject pipelines. Rough weather caused by the tropical depression on September 9 - 10, has delayed this progress.

The hydrostatic testing of the 8" pipeline, West Cameron 71 - 12, will commence on September 11, 1978.

The construction of the 10" pipeline, Ship Shoal Block 219 - 291 will commence September 11, 1978, with pipe lay in Block 291.

Please call if you have any questions.

Sincerely,


John M. Kelley

Field Engineer

NEW ORLEANS OCS
FILE CODE _____
ROUTE _____ INITIAL _____
____ MGR. _____
____ ASST. MGR. _____

SEP 12 1978

____ P. LEGAL _____
____ PAO _____
____ EAD _____
____ OPS _____
____ STUDIES _____
____ MGMT. SER. _____

JMK/rdm

cc: W.K. Peaker
A.D. Perot

Ford, Bacon & Davis Construction Corporation

TELEPHONE 318/388-1530

ENGINEERS - CONSTRUCTORS

TWX: 510-977-5395

3901 JACKSON STREET
P. O. BOX 1762
MONROE, LOUISIANA 71201

August 23, 1978

H-2159B
File: MW-OS-7.2

Mr. John L. Rankin, Manager
Outer Continental Shelf Land Office
Bureau of Land Management
U. S. Department of the Interior
Hale Boggs Federal Building
Suite 841
500 Camp Street
New Orleans, LA 70130

NEW ORLEANS OCS
FILE CODE _____
ROUTE _____ INITIAL _____
MGR. _____
ASST. MGR. _____
AUG 25 1978
P. LEGAL _____
PAO _____
EAD _____
OPS _____
STUDIES _____
MGMT. SER. _____

Dear Mr. Rankin:

BLM PERMIT - OCS-G, 3642

In compliance with the terms and conditions set forth in the above referenced permit Ford, Bacon and Davis Construction Corporation acting as agent for Michigan Wisconsin Pipe Line Company, hereby serves notice that construction for Block 71 Gulf of Mexico, West Cameron Area project is scheduled to commence August 27, 1978.

The method of construction will consist of a lay barge and jet barge during laying and jetting operation of the above mentioned project.

Very truly yours,



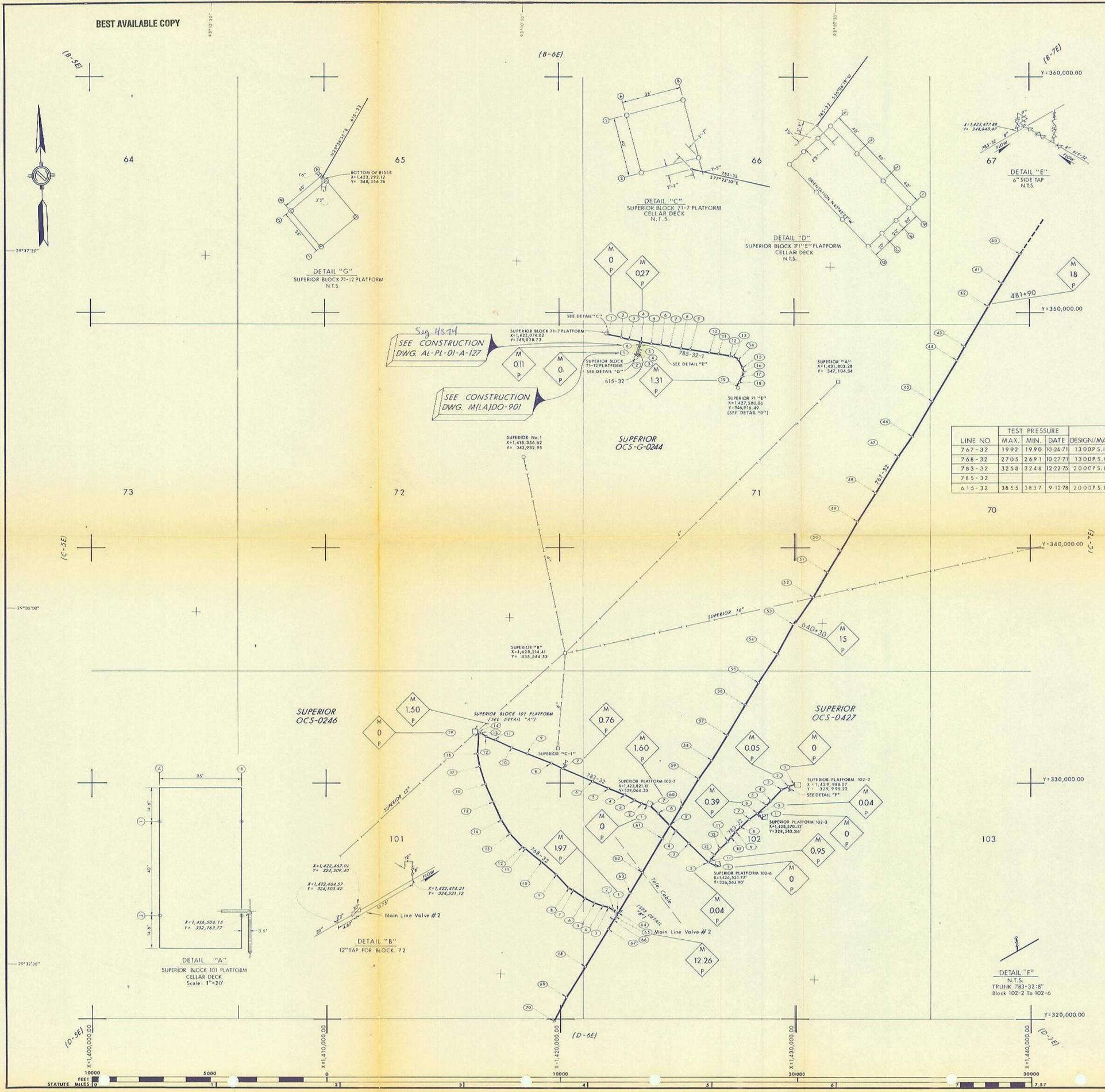
S. D. Hall
Permit Supervisor

crn

cc: Messrs. W. K. Peaker
D. L. Edgar

RECEIVED
AUG 25 12 42 PM '78
BUR. OF LAND MGMT.
OUTER CONTINENTAL
SHELL OFFICE
NEW ORLEANS, LA

BEST AVAILABLE COPY



LINE NO.	TEST PRESSURE			DESIGN/MAOP
	MAX.	MIN.	DATE	
767-32	19.92	19.90	10-24-71	1300 P.S.I.G.
768-32	27.05	26.91	10-27-71	1300 P.S.I.G.
783-32	32.58	32.48	12-22-75	2000 P.S.I.G.
785-32				
615-32	38.55	38.37	9-12-78	2000 P.S.I.G.

TRAVERSE DATA				MATERIAL SUMMARY					
POINT	STATION	BEARING	X	Y	REMARKS	LINE NO.	DESCRIPTION	QUANTITY	
767-32	30+00	BLOCK 171 LATERAL	OCS-G-2124		CONT'D FROM SHEET C-7E	767-32	Pipe Line: 30" O.D. x 0.500" W.T., API-SLX-X60	38,138'	
40	456+69	S32°03'41"W	1,439,583.46	352,465.34	Match Line		Continuous Concrete Coated, Insulider		
41	470+93	S31°48'05"W	1,438,827.75	351,258.83			Plasticized Enamel, 15lb. Asbestos Felt		
42	482+56	S30°59'20"W	1,438,214.79	350,270.28					
43	501+90	S29°14'26"W	1,437,218.86	348,612.05					
44	508+86	S30°30'22"W	1,436,879.09	348,005.12					
45	529+67	S30°06'03"W	1,435,822.56	346,211.91					
46	546+42	S34°52'12"W	1,434,982.67	344,763.07					
47	556+85	S31°40'32"W	1,434,386.51	343,907.55					
48	574+88	S31°54'15"W	1,433,439.73	342,373.11					
49	589+34	S30°32'14"W	1,432,675.25	341,145.14					
50	603+81	S32°23'44"W	1,431,940.24	339,899.19					
51	614+66	S29°38'36"W	1,431,359.06	338,983.23					
52	626+71	S33°13'51"W	1,430,762.83	337,935.52			16" Superior Pipeline		
53	640+81	S30°56'38"W	1,429,990.24	336,756.27					
54	655+74	S32°43'52"W	1,429,222.73	335,476.07					
55	669+94	S31°29'42"W	1,428,455.14	334,281.85					
56	681+35	S30°32'05"W	1,427,858.93	333,308.73					
57	695+89	S31°39'27"W	1,427,120.42	332,056.72					
58	708+41	S35°29'34"W	1,426,463.34	330,991.05					
59	718+21	S31°01'34"W	1,425,894.43	330,193.26					
60	731+93	S31°00'27"W	1,425,187.13	329,017.33					
61	747+50	S31°53'30"W	1,424,385.00	327,682.75					
62	764+52	S31°00'51"W	1,423,495.25	326,232.23			Tele Cable Crossing		
63	774+79	S30°38'14"W	1,422,966.17	325,332.18					
64	784+45	S30°38'14"W	1,422,474.21	324,521.12			8" Side Valve		
65	784+59	S30°38'14"W	1,422,467.01	324,550.40			30" Valve		
66	784+64	S30°38'14"W	1,422,464.57	324,505.40			2" Valve		
67	792+26	S31°14'06"W	1,422,039.60	323,813.55					
68	811+50	S31°57'13"W	1,421,057.60	322,210.79					
69	826+71	S30°07'20"W	1,420,252.78	320,920.48					
70	838+07	S30°07'18"W	1,419,692.92	319,938.30			End 1971 Construction		
CONTINUED ON SHEET D-6E									
768-32	12+00	BLOCK 72 LATERAL	OCS-G-2124-A			768-32	Pipe Line: 12" O.D. x 0.375" W.T., API-SLX-X46	10,381'	
1	0+00	N64°17'54"W	1,422,474.21	324,521.12			Continuous Concrete Coated, AMERICAN STEEL		
2	2+71	N65°25'41"W	1,422,222.88	324,626.90			8" Side Valve		
3	5+07	N71°45'21"W	1,422,008.07	324,725.12					
4	7+43	N72°53'11"W	1,421,784.52	324,798.81					
5	11+06	N61°05'25"W	1,421,436.71	324,905.90					
6	15+69	N55°46'51"W	1,421,032.22	325,129.28					
7	21+78	N63°36'59"W	1,420,528.48	325,471.87					
8	23+66	N44°52'06"W	1,420,359.88	325,555.51					
9	31+72	N47°15'39"W	1,419,791.53	326,126.48					
10	39+99	N52°52'31"W	1,419,183.95	326,687.92					
11	48+76	N53°03'38"W	1,418,484.31	327,217.53					
12	49+95	N42°25'46"W	1,418,389.59	327,288.75					
13	57+98	N33°01'16"W	1,417,847.97	327,881.29					
14	65+08	N24°41'11"W	1,417,460.82	328,476.97					
15	73+14	N23°40'24"W	1,417,124.17	329,209.36					
16	81+50	N16°59'21"W	1,416,788.42	329,975.19					
17	89+42	N09°26'14"W	1,416,556.96	330,732.77					
18	94+65	N02°10'41"W	1,416,471.32	331,247.99					
19	103+81		1,416,506.15	332,163.77			Superior Block 101 Platform Column B-2		
783-32	8+58	BLOCK 101-1	TC 102-7			783-32	Pipe Line: 8" O.D. x 0.500" W.T., A.S.T.M. Gr. 'B'	7,896.35'	
1	0+00	N76°56'56"W	1,423,789.78	329,094.52			Superior Block 102-7 Platform		
2	3+69.28	N66°05'34"W	1,423,430.04	329,177.91			43' W.D.		
3	6+91.77	N61°09'31"W	1,423,135.22	329,308.60					
4	11+20.89	N67°09'01"W	1,422,759.33	329,515.60			42' W.D.		
5	18+67.68	N68°09'00"W	1,422,071.14	329,805.59					
6	26+08.29	N66°02'36"W	1,421,383.73	330,081.23			42' W.D.		
7	40+00.80	N66°48'02"W	1,420,111.18	330,646.65			8" Side Valve		
8	45+15.72	N66°57'35"W	1,419,637.90	330,849.49			Tele Cable Crossing		
9	56+22.38	N68°57'09"W	1,418,619.52	331,282.61			42' W.D.		
10	63+32.69	N64°27'26"W	1,417,956.60	331,537.71					
11	71+33.14	N66°04'05"W	1,417,234.38	331,882.85			41' W.D.		
12	75+13.42	N67°08'14"W	1,416,886.70	332,036.91					
13	78+10.57	N58°19'55"W	1,416,612.80	332,152.40			41' W.D.		
14	78+96.35		1,416,539.88	332,197.38			Superior Block 101-1 Platform		
783-32	8+58	BLOCK 102-6	TO 102-7				Pipe Line: 8" O.D. x 0.500" W.T., A.S.T.M. Gr. 'B'	3,695.08'	
1	0+00	N62°54'10"W	1,426,520.87	326,564.76			Superior Block 102-6 Platform		
2	2+35.50	N66°17'59"W	1,426,311.22	326,672.03			8" Side Valve, 42' W.D.		
3	14+4.00	N46°05'20"W	1,425,466.43	327,479.33					
4	21+59.60	N49°10'02"W	1,424,922.08	328,003.37			42' W.D.		
5	24+86.72	N48°58'50"W	1,424,674.57	328,217.26			30" Mich. Wisc. Pipeline		
6	32+4.82	N46°32'26"W	1,424,167.11	328,725.06			43' W.D.		
7	36+95.08		1,423,811.10	329,062.42			Superior Block 102-7 Platform		
783-32	8+58	BLOCK 102-2	TO 102-6				Pipe Line: 8" O.D. x 0.500" W.T., A.S.T.M. Gr. 'B'	4,997.66'	
1	0+00	S69°44'46"W	1,429,988.07	329,995.22			Superior Block 102-2 Platform		
2	2+60.44	S60°07'26"W	1,429,743.73	329,905.06			8" Side Valve, 42' W.D.		
3	6+3.87	S45°33'03"W	1,429,445.94	329,733.99					
4	12+41.25	S45°05'02"W	1,428,990.93	329,287.65			42' W.D.		
5	15+16.12	S47°50'46"W	1,428,796.28	329,093.57					
6	20+59.11	S53°11'38"W	1,428,393.74	328,729.16			42' W.D.		
7	24+78.93	S50°28'07"W	1,428,057.60	328,477.64					
8	29+56.98	S43°14'06"W	1,427,688.89	328,173.36			42' W.D.		
9	32+50.64	S42°42'52"W	1,427,487.61	327,959.53					
10	35+63.06	S43°40'53"W	1,427,275.68	327,729.98			42' W.D.		
11	37+93.22	S46°48'49"W	1,427,116.72	327,563.53					
12	42+31.99	S41°38'25"W	1,426,796.80	327,263.25			42' W.D.		
13	46+18.94	S37°08'16"W	1,426,539.69	326,974.07					
14	49+97.66		1,426,311.22	326,672.03			8" Side Valve, 42' W.D.		
783-32	8+58	BLOCK 102-3					Pipe Line: 8" O.D. x 0.500" W.T., A.S.T.M. Gr. 'B'	233.02'	
1	0+00	N49°46'54"W	1,428,571.67	328,578.70			Superior Block 102-3 Platform		
2	2+33.02		1,428,393.74	328,729.16			8" Side Valve, 42' W.D.		

LEGEND

- Main Line Valve
- Check Valve
- Side Valve
- Rectifier
- Platform
- Platform w/Halibut

NOTES

- Stationing indicates Pipe Footage Beginning and Ending at Bottom of Riser.
- Grid Based on Louisiana (Lambert) Plane Coordinate System - South Zone.
- Locations of Platforms and Pipelines owned by others, based on owners data.
- Facilities installed in Accordance with D.O.T. Regulations.

AS BUILT

SEP 19 1979

DAVID L. DECAR
REGISTERED PROFESSIONAL ENGINEER
STATE OF LOUISIANA

SEP 19 1979

PREPARED BY
Jord, Bacon & Davis Construction Corporation
MONROE, LOUISIANA

MICHIGAN WISCONSIN PIPE LINE CO.
ENGINEERING DEPARTMENT
DETROIT, MICHIGAN

SEP 4 1974

DRAWN BY E. RITTER DATE 2/3/72 APPROVED BY DATE
DRAFTING CHK. DATE 2-7-72 APPROVED BY DATE
DESIGN CHK. DATE
SCALE 1" = 2,000' PROJECT MANAGER-OFFSHORE

OFFSHORE GATHERING SYSTEM
BLOCK 171 & 72 LATERAL
WEST CAMERON AREA

TRUNK NUMBER 767 / 768 STATE CODE 32 SHEET C-6E

4/9/74

RMD
3/2/78

SN 4874

3341 (400)

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OCS-G 3642

West Cameron Area

February 24, 1978

DECISION

Michigan Wisconsin Pipe Line Company

Right-of-way

Application Approved

The above application was filed for approval on October 31, 1977, pursuant to Sec. 5(c) of the Outer Continental Shelf Lands Act of August 7, 1953 (67 Stat. 462) and the regulations promulgated thereunder (43 CFR 2883).

This application is for a right-of-way 200 feet in width for the construction, maintenance, and operation of an 8 5/8-inch natural gas pipeline, 0.08 mile in length from The Superior Oil Company's Platform "71-12" to a subsea tie-in with Michigan Wisconsin Pipe Line Company's 8 5/8-inch gas pipeline, all in Block 71, West Cameron Area, as shown on Drawing Number 615-32-1, Sheet 1 of 1 dated October 26, 1977, submitted with the application.

The pipeline is to be laid at a depth of not less than three (3) feet below the mudline. All valves and taps will be buried to a minimum of one (1) foot below the mudline.

Proof of notification of the lessee affected by the subject right-of-way has been furnished.

The applicant has further consented to the stipulations regarding nondiscrimination in employment, which are hereby made a part of this permit.

This application has been found to be in proper form and in accordance with 43 CFR 2883.2-1. The qualifications of the company and the authority of the signing officer are of record at this office.

The annual rental for the pipeline is \$5.00. Operator submitted two drafts totaling \$15.00 to cover the rental for 1978 and the required application fee of \$10.00.

Approval of this right-of-way is subject to the proposed pipeline being designed, constructed, operated, and maintained in compliance with applicable Department of Transportation regulations.

Accordingly, the application is hereby approved and the right-of-way granted.

Proof of construction of the pipeline authorized hereunder should be submitted in accordance with 43 CFR 2883.2-3(a).

Michigan Wisconsin Pipe Line Company

OCS-G 3642

Design characteristics of this pipeline are:

<u>Pipeline Nomenclature</u>	<u>Maximum Allowable Pressure/WP Ratings</u>
Submerged component	2,922 psig
Riser component	2,029 psig
Piping, fittings, valves	2,160 psig

Hydrostatic pressure test with water will be conducted from 3,800 psig to 3,855 psig for eight (8) hours.

The maximum allowable pressure for this pipeline is 2,029 psig, and shall not be exceeded except when hydrostatically pressure-testing the pipeline.

The permittee shall notify the Manager at least five (5) days prior to commencing construction of the pipeline and at least forty-eight (48) hours prior to the hydrostatic test. Hydrostatic test data including test procedure, hold time, a copy of pressure charts and results, along with two copies of the completion report consisting of a plat showing the location of the pipeline as installed, must be submitted to this office within sixty (60) days after completion.



H. P. Sieverding
Acting Manager

cc: ✓ Geological Survey, DOI
Office of Pipeline Safety Operations, DOT

025-6 3642



DEPARTMENT OF THE ARMY
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS
P. O. BOX 60267
NEW ORLEANS, LOUISIANA 70160

BEST AVAILABLE COPY

LENOB-SP (Gulf of Mexico)1690

19 December 1977

Michigan Wisconsin Pipe Line Company
P.O. Box 1762
Monroe, Louisiana 71201

DEC 30 9 53 AM '77

Gentlemen:

Additional drawing attached (sheet 1 of 1), furnished with your application dated 25 October 1977, covering installation and maintenance of an 8-inch gas pipeline, is approved and will be included in your plans for the work authorized by the Secretary of the Army in permit dated 1 July 1971 from the District Engineer at New Orleans, Louisiana. This permit authorized installation and maintenance of 12- and 30-inch gas pipelines, in the Gulf of Mexico and Lower Mud Lake, central to a point about 9.8 miles southwesterly from Grand Chenier, Louisiana, in Cameron Parish. The inclosed Notice of Authorization, ENG Form 4336, is to be conspicuously displayed at the site of work.

The time limit for completion of this work is extended to 31 December 1980.

The conditions to which the work is made subject, excepting the time limit for completion, remain in full force and effect.

If the structure or work authorized is not completed on or before the date herein specified, this authorization, if not previously revoked or specifically further extended, will cease and become null and void.

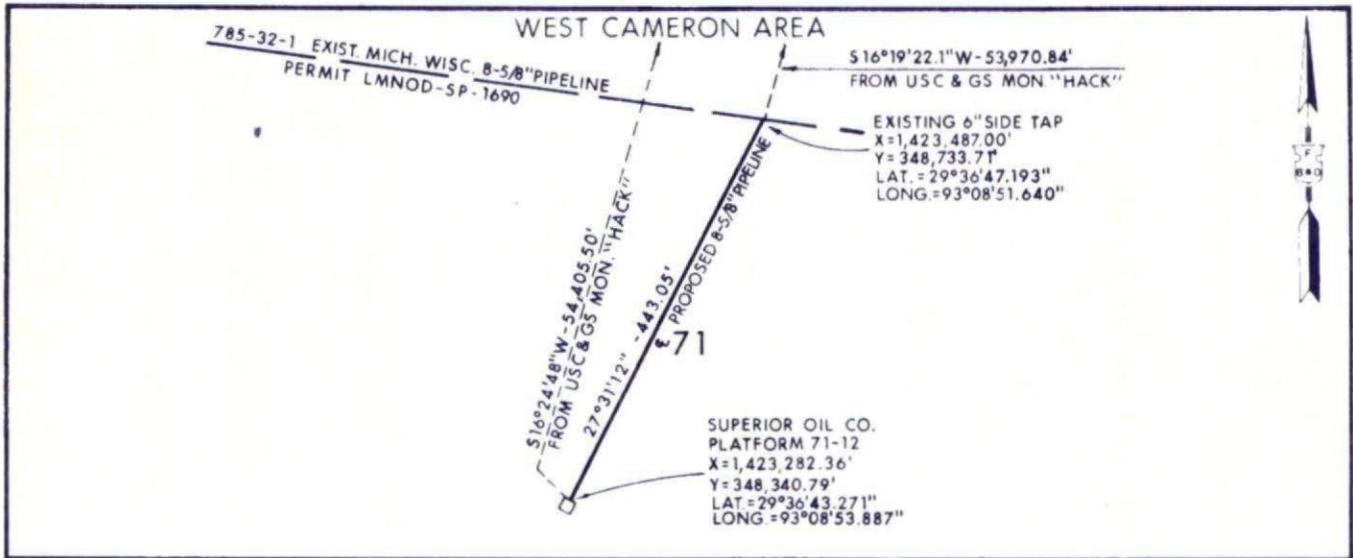
BY AUTHORITY OF THE SECRETARY OF THE ARMY:

- 2 Incl
- 1. Drawing
- 2. ENG Form 4336

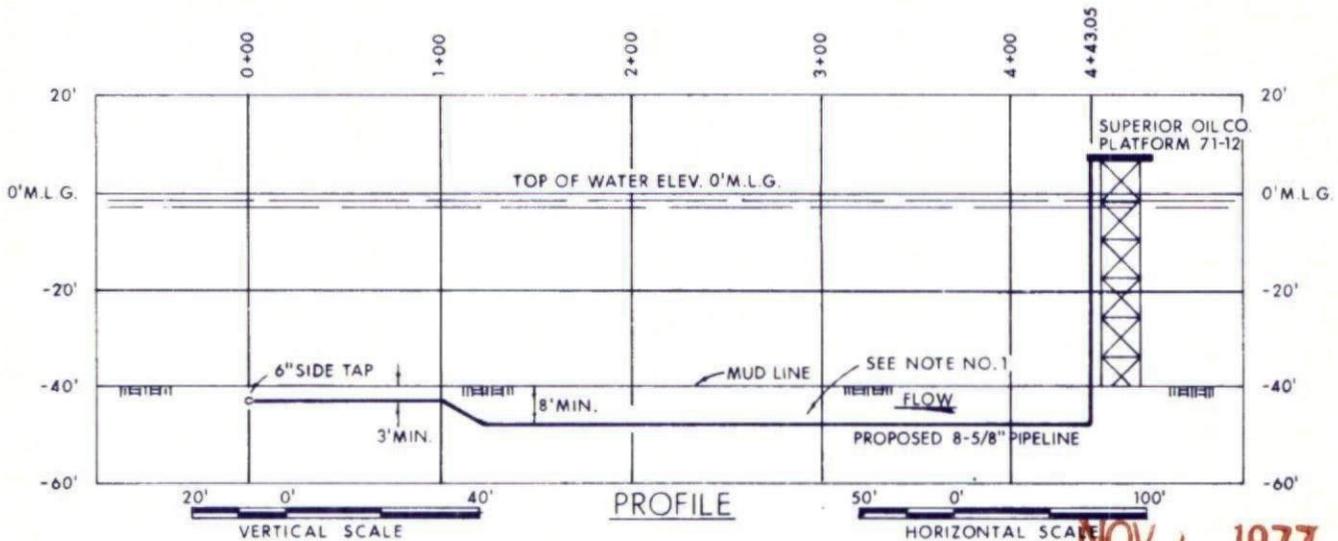
HENRY R. SCHORR
Asst Chief, Operations Division
for
EARLY J. RUSH III
Colonel, CE
District Engineer

C.F. incl 1

US Department of the Interior
Bureau of Land Management
Hale Boggs Federal Building, Suite 841
300 Camp Street
New Orleans, Louisiana 70130



NOTE:
FACILITIES DESIGNED IN ACCORDANCE
WITH D.O.T. REGULATIONS



- NOTE:
- (1) PIPE TO BE BURIED AS SHOWN IN PROFILE
 - (2) SPOIL FROM PIPE BURIAL TO BE DISTRIBUTED SO AS NOT TO DECREASE WATER DEPTH MORE THAN SIX INCHES.

NOV 1 1977

APPLICATION BY **Ford, Bacon & Davis**
Construction Corporation

ACTING AS AGENT FOR
MICHIGAN WISCONSIN PIPE LINE COMPANY

PROPOSED
8⁵/₈" NATURAL GAS PIPELINE
CROSSING UNDER THE
GULF OF MEXICO
LOCATED IN BLOCK 71
WEST CAMERON AREA
OFFSHORE, LOUISIANA

R Dean Dick DATE 10-25-77

REV. PLAN 10-26-77 C.H. B ADDED NOTE C.H. 11-1-77 *RDD*

DWG. C.E.HOWSE	DATE 10-21-77	THIS PIPELINE TO BE USED TO TRANSPORT NATURAL GAS FROM VARIOUS GAS FIELDS OFFSHORE LA TO VARIOUS DISTRIBUTION POINTS	MICHIGAN WISCONSIN PIPE LINE CO.
SCALE AS SHOWN	APP'D.		DETROIT, MICHIGAN
CHK'D. B	APP'D. <i>RDD</i> 10-25		DWG. NO. RC-615-32-1

Incl 1



United States Department of the Interior

GEOLOGICAL SURVEY

434 IMPERIAL OFFICE BLDG., 3301 N. CAUSEWAY BLVD.

P. O. BOX 7944

METAIRIE, LOUISIANA 70010

TEL: (504) 837-4720

DEC 7 1977

Memorandum

To: Manager, Outer Continental Shelf Office, Bureau of Land Management, 841 Hale Boggs Federal Building, 500 Camp Street, New Orleans, Louisiana 70130

From: Acting Conservation Manager, Gulf of Mexico OCS Operations

Subject: Michigan Wisconsin Pipe Line Company's Pipeline Right-of-Way Application, BLM OCS-G 3642, Reference 3341(400)

We have reviewed the safety features and design specifications for the subject Right-of-Way Application, dated October 24, 1977, in accordance with the MOU dated August 1, 1974. It is for the construction, maintenance, and operation of an 8 5/8-inch gas pipeline 443 feet in length from Superior Oil Company's Platform "71-12", West Cameron Block 71, lease OCS 0244, to a subsea tie-in with Michigan Wisconsin Pipe Line Company's 8 5/8-inch gas pipeline, BLM OCS-G 2124-E, in the same block.

Based upon information submitted in the application, the design characteristics of this pipeline are calculated to be as follows:

<u>Pipeline Component</u>	<u>Maximum Allowable Operating Pressure/WP Ratings</u>
Submerged component	2,922 psig
Riser component	2,029 psig
Piping, fittings, valves	2,160 psig

Hydrostatic pressure test with water will be conducted from 3,800 psig to 3,855 psig for 8 hours.

Based on these calculations, we recommend that the maximum allowable operating pressure for this pipeline be 2,029 psig, and that this pressure may be exceeded only when hydrostatically pressure-testing the pipeline. We also recommend that valves and taps be

provided with a minimum of three feet of cover, either through burial or with sandbags.

The technical aspects of the proposed pipeline are acceptable in accordance with appropriate regulations and standards.

We would appreciate receiving a copy of the plat showing the location of the pipeline as installed.


Acting Conservation Manager

DEC 9 1 22 PM '77
FEDERAL BUREAU OF INVESTIGATION
U.S. DEPARTMENT OF JUSTICE
WASHINGTON, D.C. 20535

MemorandumDEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTPRODUCTION CONTROL
PIPELINE SECTIONIN REPLY REFER TO:
3341 (400)**BEST AVAILABLE COPY**

To : Conservation Manager
Gulf of Mexico OCS Operations

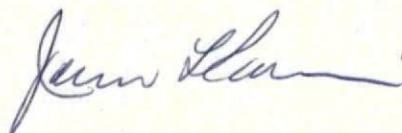
FROM : Manager
New Orleans OCS Office

SUBJECT : Michigan Wisconsin Pipe Line Company's Pipeline Right-of-way
Application (OCS-G 3642)

Date: November 23, 1977

Attached is additional information which you may use to further evaluate the subject application.

If you have any questions regarding this matter, please contact Mr. Emile H. Simoneaux, Jr. of this office.



Attachment (1)
Letter dated November 19, 1977 w/attachment

NOTED-MC INTOSH

Ford, Bacon & Davis

Construction Corporation

TELEPHONE 318/388-1530

ENGINEERS – CONSTRUCTORS

TWX: 510-977-5395

3901 JACKSON STREET
P. O. BOX 1762
MONROE, LOUISIANA 71201

November 19, 1977

H-2159-B
File: MW-31.1

Mr. Emile Simoneaux
OCS Land Office
Bureau of Land Management
U. S. Department of the Interior
Suite 841
Hale Boggs Federal Building
500 Camp Street
New Orleans, LA 70130

Dear Mr. Simoneaux:

OCS-G-3642

As requested during our recent phone conversation concerning the subject filing, the subsea tap fabrication depicting the proposed valving has been added to Drawing Number PL-615-32-1 for your reference. Four (4) prints of the above drawing are enclosed. Also a zerox copy of the specific gravity computation for this project is attached for your review. This transmittal should comply with your recent requests, however, should additional information be required please advise.

Sincerely,

R. Dean Dick
R. Dean Dick
Project Engineer

mgh
Enclosures

cc: Messrs. M. J. Williams/with enclosure
A. J. Ginnard/with enclosure
D. L. Edgar/with enclosure

NOV 23 8 56 AM '77
FEDERAL BUREAU OF INVESTIGATION
U.S. DEPARTMENT OF JUSTICE
NEW ORLEANS, LA.

SPECIFIC GRAVITY CALCULATION
FOR W.C. 71-12 PIPELINE

BEST AVAILABLE COPY

DATA: PIPE - 8-5/8" O.D. x 0.500" W.T., 43.39 #/FT.
C/W 60 MILS X-TRU COAT
WATER DENSITY = 62.4 #/CUFT.

CALCULATION: PIPE O.D. = 8.625 + 2(.06) = 8.745"
= 0.7288 FEET

$$\begin{aligned} V_p &= \text{VOLUME OF PIPE} \\ &= \pi \frac{D^2}{4} \\ &= \pi (.7288)^2 / 4 \\ &= .4171 \text{ CUFT/FT.} \end{aligned}$$

$$\begin{aligned} W_p &= \text{WEIGHT OF PIPE} + \text{WEIGHT OF COAT} \\ &= 43.39 \text{ #/FT} + 0.82 \text{ #/FT} \\ &= 44.21 \text{ #/FT} \end{aligned}$$

$$G = \frac{W_p}{\rho V_p} = \frac{44.21}{(62.4)(.4171)}$$

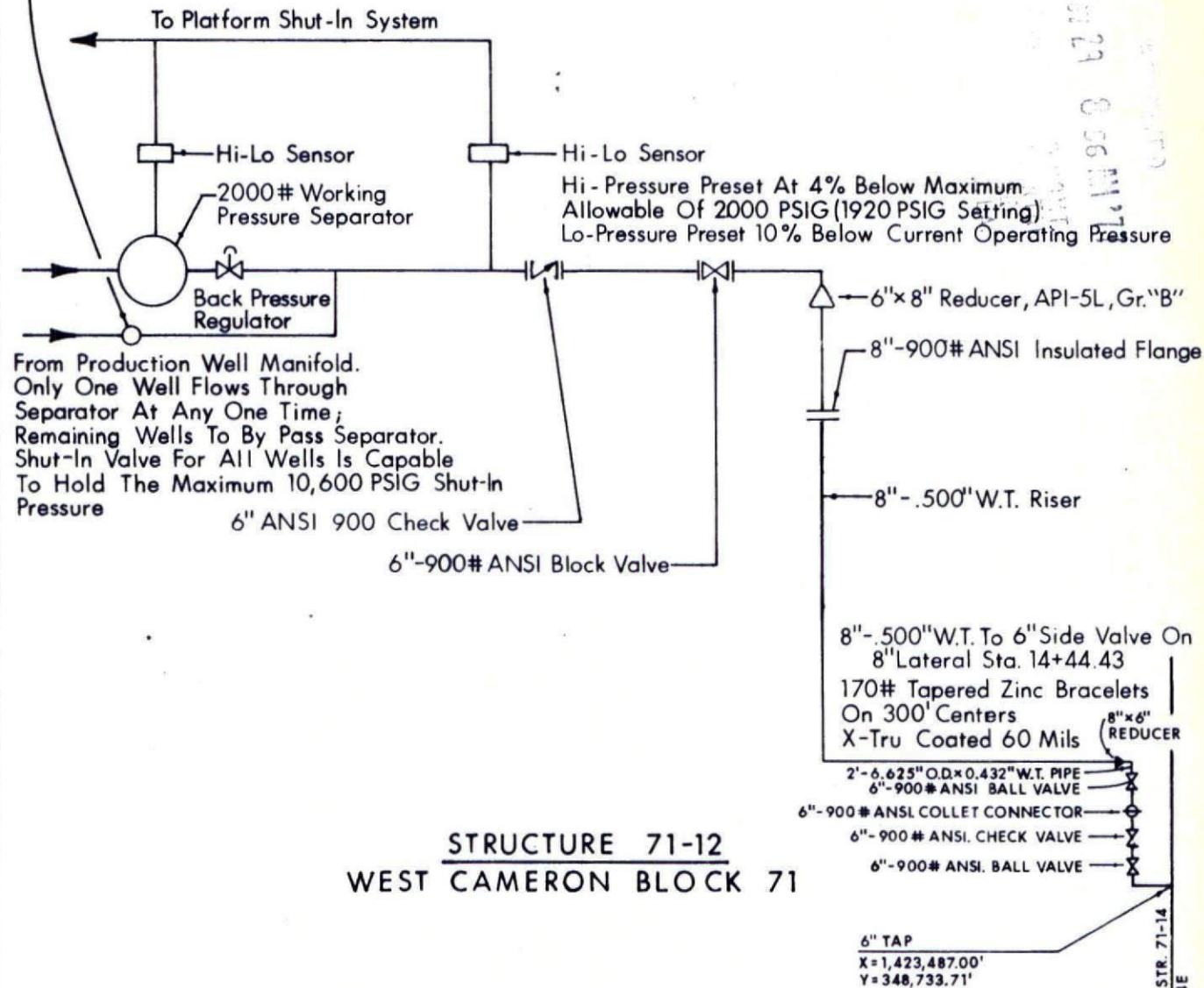
$$G = 1.70$$

29 8 5 1977

NOTE

The Relief Valve On The Prod Well Manifold (Required As A Redundant Safety System) Is Preset At 1920 PSIG. Producer To Propose Valve Size And Rating In His Filing.

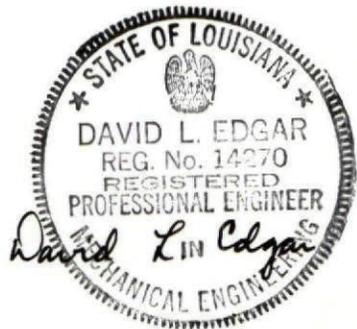
Platform Shut-In System Is Designed So That A Signal From Any Sensor Will Shut Wells In.



**STRUCTURE 71-12
WEST CAMERON BLOCK 71**

- 6" x 8" Reducer, API-5L, Gr. "B"
- 8"-900# ANSI Insulated Flange
- 8"-.500" W.T. Riser
- 8"-.500" W.T. To 6" Side Valve On 8" Lateral Sta. 14+44.43
- 170# Tapered Zinc Bracelets On 300' Centers
- X-Tru Coated 60 Mils
- 8" x 6" REDUCER
- 2'-6.625" O.D. x 0.432" W.T. PIPE
- 6"-900# ANSI BALL VALVE
- 6"-900# ANSI COLLET CONNECTOR
- 6"-900# ANSI CHECK VALVE
- 6"-900# ANSI BALL VALVE
- 6" TAP
- X=1,423,487.00'
- Y=348,733.71'

8"-.500" W.T. BETWEEN STR. 71-7 & STR. 71-14
W. CAMERON AREA OCS-G-2124E



NOV 19 1977

NOTE:
Design According To
D.O.T. Regulations.

ADDED PIPE DATA 11-19-77 C.E.H. RAO

OCS-63642

SHEET 1 OF 1

SCALE NONE		SCHEMATIC SAFETY SHUT DOWN SYSTEM HI-LO PRESSURE & LEVEL SENSORS	MICHIGAN WISCONSIN PIPE LINE CO. DETROIT, MICHIGAN
DRAWN C.H.	DATE 10-21-77		
CHECKED <i>TS</i>	DATE 10-22-77		
APPROV. <i>RAO</i>	DATE 10-22-77		
DWG. NO. PL-615-32-1			A

Ford, Bacon & Davis

Construction Corporation

TELEPHONE 318/388-1530

ENGINEERS - CONSTRUCTORS

TWX: 510-977-5395

3901 JACKSON STREET
P. O. BOX 1762
MONROE, LOUISIANA 71201

November 4, 1977

H-2159-B
File: MW-25.6

Mrs. LaNelle Boehm
OCS Land Office
Bureau of Land Management
U. S. Department of the Interior
Suite 841
Hale Boggs Federal Building
500 Camp Street
New Orleans, LA. 70130

Dear Mrs. Boehm:

OCS-G-3641
✓ OCS-G-3642

Nov 7 10:10 AM '77

In response to your recent request, the following items involving the above application filings are attached for your review and reference:

OCS-G-3641

- 1) Four (4) prints of revised Drawing RC-612-32-1 as noted.
- 2) Copy of Amoco Production Company's return receipt with date of delivery, October 17, 1977, shown.
- 3) Copy of letter dated November 3, 1977 requesting a letter of no objection from Texaco, Inc. % Mr. Alton McClung.

OCS-G-3642

- 1) Four (4) prints of revised Drawing RC-615-32-1 as noted.

Should you require any additional information, please advise.

Sincerely,

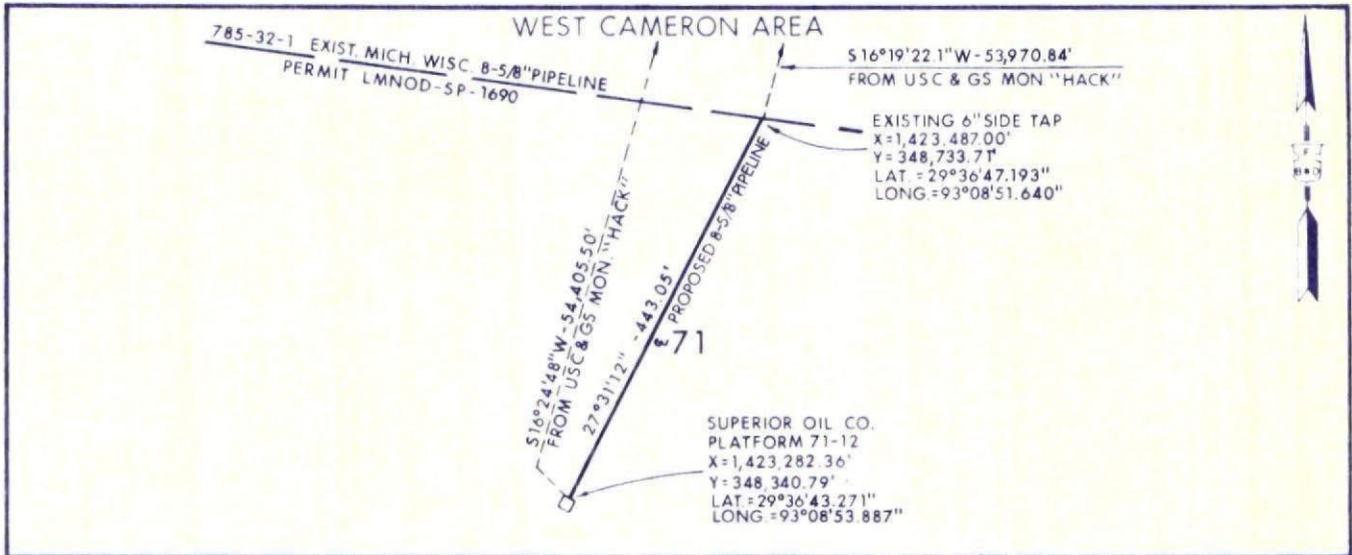
R. Dean Dick

R. Dean Dick
Project Engineer

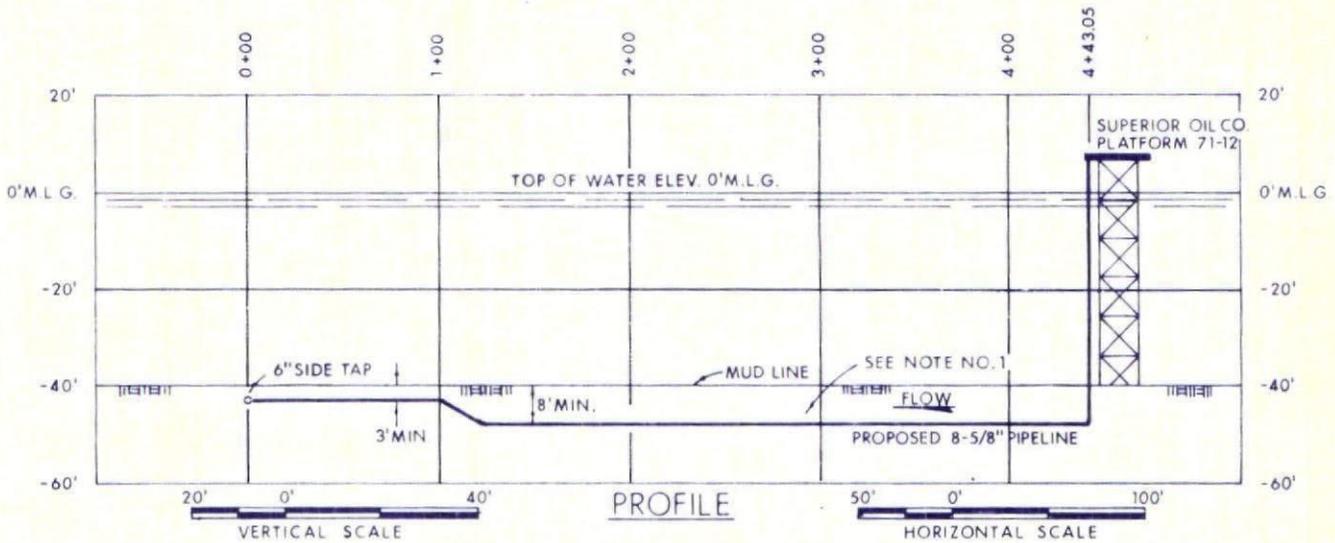
mgh
Enclosures

cc: Messrs. M. J. Williams/with map attachments
D. L. Edgar/with map attachments

BEST AVAILABLE COPY



NOTE:
FACILITIES DESIGNED IN ACCORDANCE
WITH D.O.T. REGULATIONS



NOTE:
(1) PIPE TO BE BURIED AS SHOWN IN PROFILE
(2) SPOIL FROM PIPE BURIAL TO BE DISTRIBUTED SO AS NOT
TO DECREASE WATER DEPTH MORE THAN SIX INCHES.

NOV 1 1977

APPLICATION BY **Jord, Bacon & Davis**
Construction Corporation

ACTING AS AGENT FOR
MICHIGAN WISCONSIN PIPE LINE COMPANY

PROPOSED
8 5/8" NATURAL GAS PIPELINE
CROSSING UNDER THE
GULF OF MEXICO

LOCATED IN BLOCK 71
WEST CAMERON AREA
OFFSHORE, LOUISIANA

R Dean Dick DATE 10-25-77

REV. PLAN 10-26-77 C.H. B ADDED NOTE C.H. 11-1-77 (10)

DWG. C.E.HOWSE	DATE 10-21-77	THIS PIPELINE TO BE USED TO TRANSPORT NATURAL GAS FROM VARIOUS GAS FIELDS OFFSHORE LA. TO VARIOUS DISTRIBUTION POINTS	MICHIGAN WISCONSIN PIPE LINE CO.	
SCALE AS SHOWN	APP'D.		DETROIT,	MICHIGAN
CHK'D. B	APP'D. <i>R Dean Dick</i>		DWG. NO. RC-615-32-1	REV. 11-1-77

DCS-623642

MemorandumDEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENTIN REPLY REFER TO:
3341 (400)

To : Conservation Manager
Gulf of Mexico OCS Operations

FROM : Manager
New Orleans OCS Office

SUBJECT : Michigan Wisconsin Pipe Line Company's Pipeline Right-of-way
Application, OCS-G 3642

Date: November 7, 1977

In accordance with the memorandum of understanding between the Bureau of Land Management and U. S. Geological Survey signed August 1, 1974, the subject application is attached.

Please review the technical aspects of the proposed pipeline. If you have any questions regarding this matter, please contact Mr. Emile H. Simoneaux, Jr. of this office.



Attachments

1. Application dated October 24, 1977
2. Drawing No. PL-615-32-1 dated October 22, 1977
3. Drawing No. RC-615-32-1, as revised
4. Drawing No. 615-32-1 dated October 26, 1977
5. Confirmation/Report of Telephone Conversation dated November 7, 1977
6. Amended Decision dated May 20, 1977
7. Memorandum dated May 20, 1977

NOTED--MC BEE
NOTED--MC INTOSH

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONFIRMATION/REPORT OF TELEPHONE CONVERSATION

T O	Name Dean Dicks	F R O M	Name Emile H. Simoneaux, Jr.
	Office Ford, Bacon & Davis Const. Corp.		Office New Orleans OCS Office
	Location Monroe, Louisiana		Location New Orleans, Louisiana
	Telephone Number 387-1175		Telephone Number 589-6541

Purpose of Call:

I called Mr. Dicks to inform him that his safety schematic for application OCS-G 3642 does not depict the sub-sea tie-in assembly. He said that he would forward a schematic depicting the sub-sea assembly. I also informed him that he requested to test the line from 3800 psig to 4000 psig, and I told him that we would not allow him to test the line higher than 3855 psig. I explained to him that the Internal Pressure at Specified Minimum Yield Strength is equal to 4057.97 and we would allow a test at a maximum of 95% yield which is equal to 3855 psig. He agreed to test the line in accordance to the specifications given in the decision. In addition, I requested that he forward his calculations regarding the specific gravity of the empty line since my calculations do not agree with what is given in the application.

Explanatory Remarks:

November 7, 1977
(Date)

Emile H. Simoneaux, Jr.
(Signature)

MICHIGAN WISCONSIN PIPE LINE COMPANY

MEMBER OF THE AMERICAN NATURAL GAS SYSTEM

ONE WOODWARD AVENUE, DETROIT, MICHIGAN 48226



October 24, 1977

H-2159-B
File: MW-31.1

Mr. John L. Rankin
Manager
Outer Continental Shelf Land Office
Bureau of Land Management
U. S. Department of the Interior
Hale Boggs Federal Building - Suite 841
500 Camp Street
New Orleans, LA 70130

Dear Mr. Rankin:

Michigan Wisconsin Pipe Line Company
Proposed Pipeline Located from Block
71-12 to an existing sidetap on the
8-inch Block 71 West Cameron Area Pipeline

RECEIVED
OCT 31 11 23 AM '77
OFFICE OF THE ATTORNEY GENERAL
STATE OF LOUISIANA

Pursuant to the authority granted in Section 5(c) of the Outer Continental Shelf Lands Act of August 7, 1953 (67 Sta. 462) and in compliance with regulations contained in Title 43, Subpart 2883, Section 2883.1, Title 30, Subpart 250, Section 250.19, and requirements contained in OCS Orders No. 8 and 9 issued on October 30, 1970, Michigan Wisconsin Pipe Line Company hereby applies, in duplicate, for a right of way two hundred feet (200 ft.) in width to construct a pipeline as shown on the following Drawing Number, RC 615-32-1, (Exhibit "A") attached and made a part hereof:

1. Proposed 8-inch pipeline located from Block 71-12 to a sidetap on the 8-inch Block 71 West Cameron Area Pipeline, Offshore Louisiana.

This pipeline will be used to gather and transport natural gas from Federal Waters offshore Louisiana to customers in various North Central states. The tentative construction date is May or June, 1978.

Michigan Wisconsin Pipe Line Company has previously filed all necessary papers required under Subparagraph 2883.1, Part (c) of the regulations, said filing being found in Qualification File Number 160 in your office.

Attached hereto find our Draft Number 87395 in the amount of \$10.00 covering the application fee and Draft Number 87396 in the amount of \$5.00 (based on \$5.00 per mile or fraction thereof for 0.08 total miles through Zone 4).

Mr. John L. Rankin
Page Two
October 24, 1977

In accordance with Subparagraph (d) under Paragraph 2882.2-1 application, Michigan Wisconsin Pipe Line Company has this date, by certified mail, forwarded copies of this application with map Number RC-615-32-1 to the leaseholders in the blocks traversed by the proposed pipeline.

The certified receipt of these letters of notification are attached to this application as required under the above regulations (Exhibit "B").

In compliance with your notice of April 1, 1976, the following is the design data for the proposed pipeline:

DESIGN DATA

Product to be transported	Natural gas
Pipe size	8.625" O.D.
Pipe wall thickness	0.500" W.T.
Pipe grade	API-5L, Gr. "B"
Riser pipe wall thickness	0.500" W.T.
Riser pipe grade	API-5L, Gr. "B"
Type corrosion protection	170# zinc bracelets spaced @ 300' centers 3/32" bituminous enamel and X-tru coated
Specific gravity of line (empty)	1.35
Specific gravity @ 60° F	Gas 0.60
Design working pressure and capacity	60,000 MSCF per day @2000 psig
Maximum working pressure and capacity	60,000 MSCF per day @2000 psig
Hydrostatic test pressure	4000 psig Max., 3800 psig Min. for 24 hrs.

Upon the granting of the right of way herein applied for, Michigan Wisconsin Pipe Line Company agrees to abide by the terms and conditions of the aforementioned regulations including the provisions of the "Nondiscrimination in Employment" form attached to this application.

If this application and enclosures meet with your approval, we will appreciate your issuance of the necessary permit at your earliest convenience.

Very truly yours,

MICHIGAN WISCONSIN PIPE LINE COMPANY

By: W. J. Battin

Title: _____

daw
Attachments

Mr. John L. Rankin
Page Three
October 24, 1977

I, John W. Barnes, Assistant Secretary of Michigan Wisconsin Pipe Line Company, hereby certify that W. A. Batten, Senior Vice President of said Company has corporate Authority to file and execute on behalf of said Corporation the foregoing application.

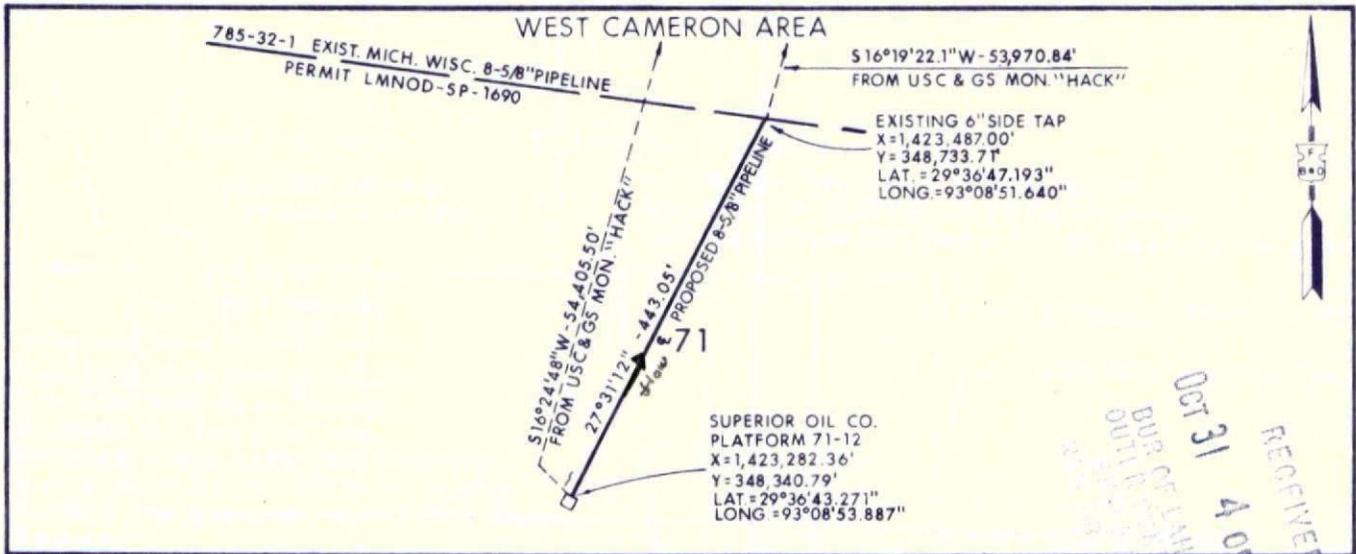
This 24th day of October, 1977.


Assistant Secretary of Michigan Wisconsin Pipe Line Company

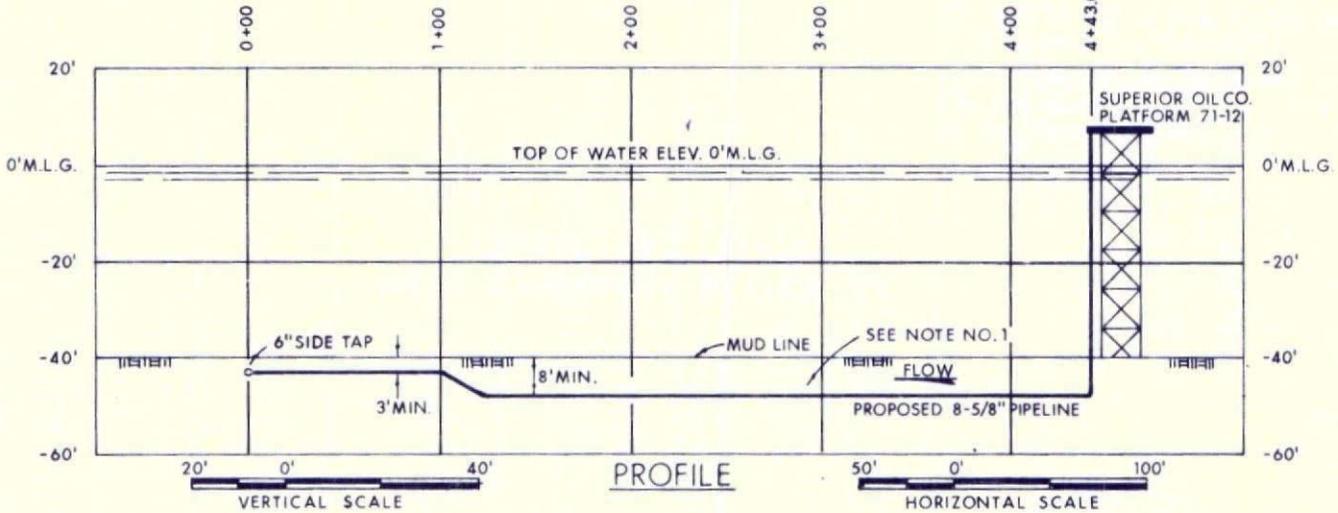
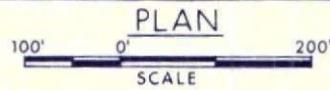
CORPORATE SEAL

RECEIVED
OCT 31 11 23 AM '77
MICHIGAN WISCONSIN PIPE LINE CO.
LANSING, MICHIGAN

BEST AVAILABLE COPY



RECEIVED
OCT 31 4 05 PM '77
BUR. OF LAND & MINERAL
OUTL. DIVISION
OFFICE
DALLAS, TEXAS, U.S.A.



- NOTE:
- (1) PIPE TO BE BURIED AS SHOWN IN PROFILE
 - (2) SPOIL FROM PIPE BURIAL TO BE DISTRIBUTED SO AS NOT TO DECREASE WATER DEPTH MORE THAN SIX INCHES.

APPLICATION BY **Ford, Bacon & Davis**
Construction Corporation

ACTING AS AGENT FOR
MICHIGAN WISCONSIN PIPE LINE COMPANY

R. Dean Dick DATE 10-25-77
1 REV. PLAN 10-26-77 C.H. B

PROPOSED
8 5/8" NATURAL GAS PIPELINE
CROSSING UNDER THE
GULF OF MEXICO

LOCATED IN BLOCK 71
WEST CAMERON AREA
OFFSHORE, LOUISIANA

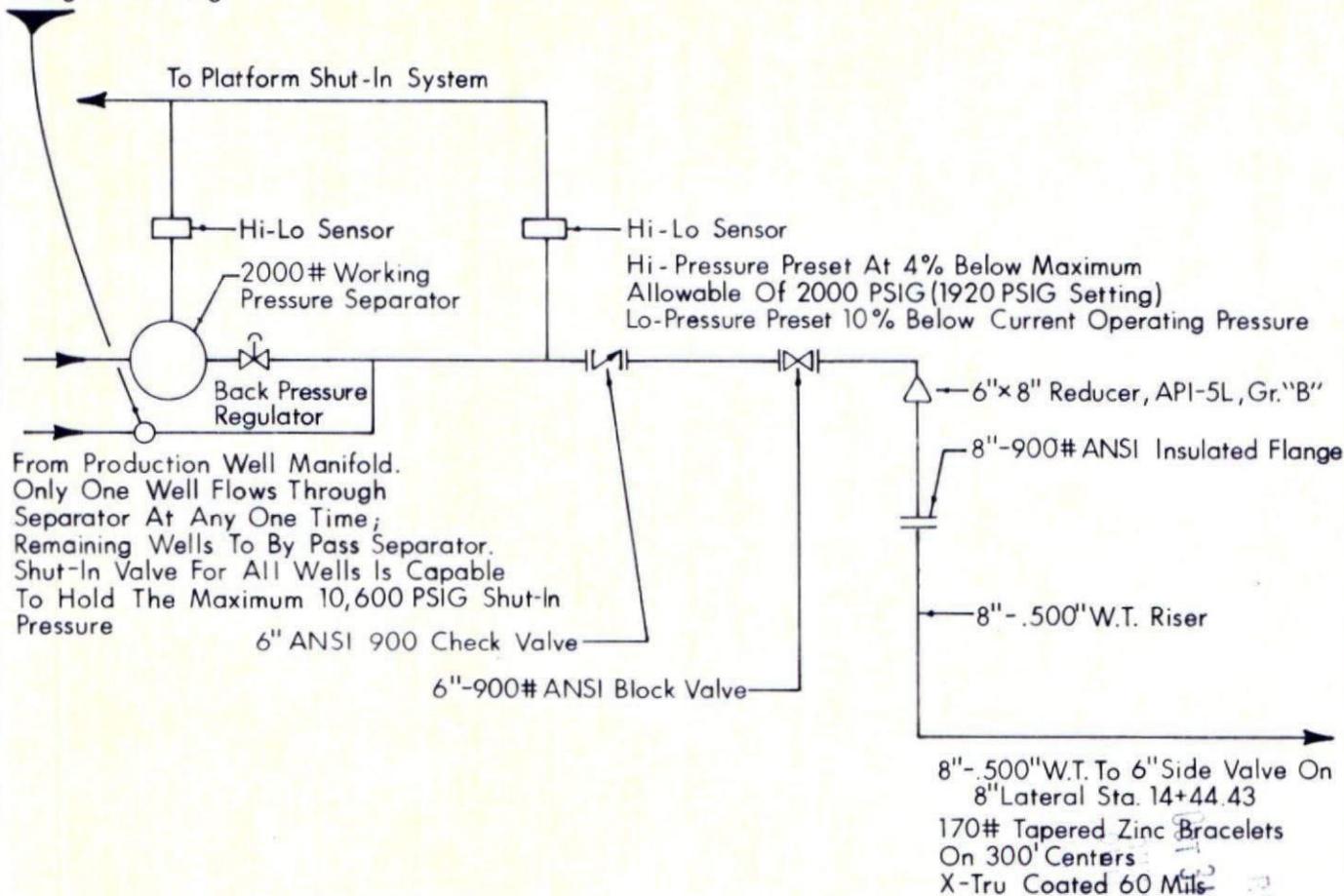
DCS-C-3642

DWG. C.E.HOWSE	DATE 10-21-77	THIS PIPELINE TO BE USED TO TRANSPORT NATURAL GAS FROM VARIOUS GAS FIELDS OFFSHORE L.A. TO VARIOUS DISTRIBUTION POINTS	MICHIGAN WISCONSIN PIPE LINE CO.	
SCALE AS SHOWN	APP'D.		DETROIT,	MICHIGAN
CHK'D. B	APP'D. RDD 10-25	DWG. NO. RC-615-32-1	REV. 10-26-77	

NOTE

The Relief Valve On The Production Well Manifold (Required As A Redundant Safety System) Is Preset At 1920 PSIG. Producer To Propose Valve Size And Rating In His Filing.

Platform Shut-In System Is Designed So That A Signal From Any Sensor Will Shut Wells In.



From Production Well Manifold. Only One Well Flows Through Separator At Any One Time; Remaining Wells To By Pass Separator. Shut-In Valve For All Wells Is Capable To Hold The Maximum 10,600 PSIG Shut-In Pressure

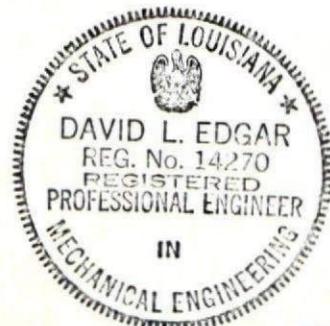
Hi-Pressure Preset At 4% Below Maximum Allowable Of 2000 PSIG (1920 PSIG Setting)
Lo-Pressure Preset 10% Below Current Operating Pressure

STRUCTURE 71-12
WEST CAMERON BLOCK 71

RECEIVED
OCT 24 4 05 PM '77
MICHIGAN DEPARTMENT OF NATURAL RESOURCES
LANSING, MICHIGAN

NOTE:

Design According To D.O.T. Regulations.



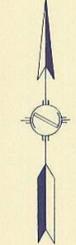
OCT 24 1977
David L. Edgar
SHEET 1 OF 1

015-6 3642

SCALE NONE		SCHEMATIC SAFETY SHUT DOWN SYSTEM HI-LO PRESSURE & LEVEL SENSORS	MICHIGAN WISCONSIN PIPE LINE CO. DETROIT, MICHIGAN	
DRAWN C. H.	DATE 10-21-77		DWG. NO. PL-615-32-1	
CHECKED <i>TS</i>	DATE 10-22-77			
APPROV. <i>RAD</i>	DATE 10-22-77			
			A	

MS-6-3642

REFERENCE	NUMBER
MICHIGAN WISCONSIN PIPE LINE CO. ENGINEERING DEPARTMENT DETROIT, MICHIGAN	
DRAWN BY C. H.	DATE 10-26-77
DESIGN CHG. <i>TS</i>	DATE <i>10-26-77</i>
APPROVED BY <i>R. Dean Dick</i>	DATE
SCALE AS SHOWN	
PROPOSED 8" PIPELINE IN BLOCK 71, WEST CAMERON AREA OFFSHORE, LOUISIANA	
DRAWING NUMBER 615-32-1	SHEET 1 OF 1
PREPARED BY FORD, BACON & DAVIS CONSTRUCTION CORPORATION MONROE, LOUISIANA	

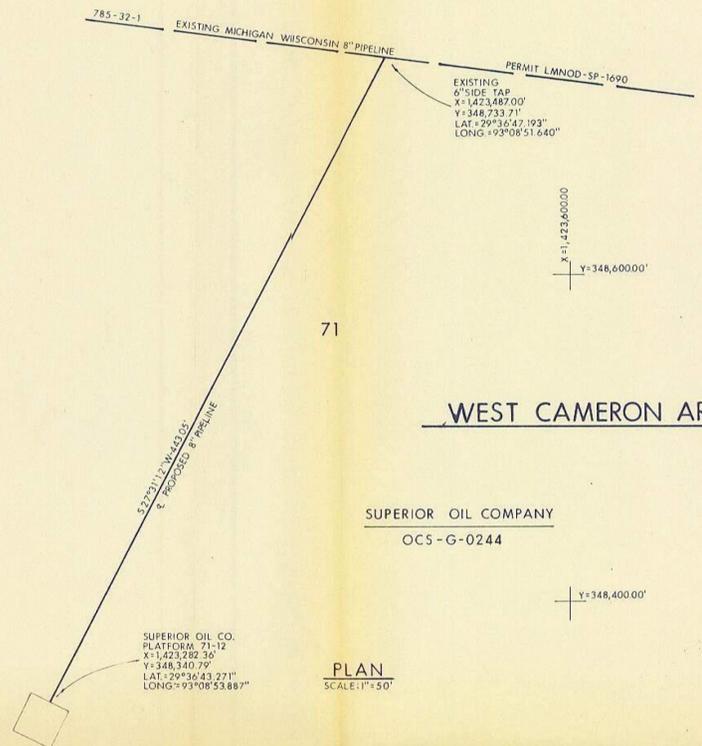


PLAN

SURVEYED	DATE
PLOTTED	BY
CHECKED	
BY	
NO.	

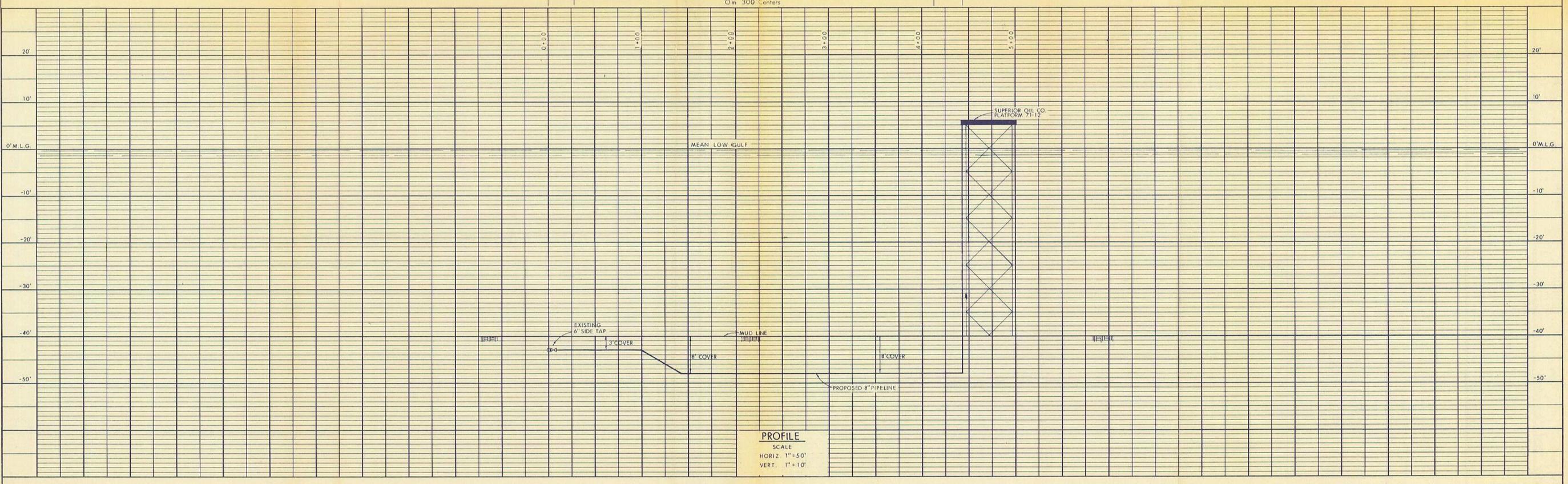
PROFILE

SURVEYED	DATE
PLOTTED	BY
CHECKED	
BY	
NO.	



PLAN
SCALE: 1" = 50'

NOTE:
FACILITIES DESIGNED IN ACCORDANCE
WITH D.O.T. REGULATIONS



PROFILE
SCALE
HORIZ. 1" = 50'
VERT. 1" = 10'

— KEEP IN FILE —

BEST AVAILABLE COPY

(Applicant) : BLM OCS-G 3642 MAOP = 2029.

(tie in
SubSEA) : BLM OCS-G 2124E MAOP = 2160 by
previous decision.

BEST AVAILABLE COPY

PIPELINE APPLICATION CHECK LIST

INSTRUCTIONS: Check the blank on the left if the statement is affirmative or correct data submitted. Mark N/A (not applicable) where appropriate. Place an X in the blank if the answer is no or if the data was not submitted. All blanks marked X must be rectified to a check (or qualified) before approval can be given for the pipeline. Enter data in the blanks on the right.

A. Verify the following general information:

No. I. Do the leases involved on the P/L application appear on the current Suspension of Production (SOP) Lease List?

II. USGS Application

- a. The applicant is a Federal lease holder and the pipeline is to be used for such purposes as:
1. Moving production to a control point for gathering, treating, storing, or measuring.
 2. Delivery of production to a point of sale.
 3. Delivery of production to a pipeline operated by a transportation company.
 4. Moving fluids in connection with lease operations, such as for injection purposes.
- b. The pipeline is within the lease boundary owned by the operator (If yes, include 30 CFR 250.19(b) in approval).
- c. Pipeline is within contiguous lease boundaries (If yes, include 30 CFR 250.19(b) in approval).
- d. Pipeline is within non-contiguous lease boundaries (If yes, include 30 CFR 250.18(c) and 30 CFR 250.19(b) in approval).
- e. Lessee's "intent to cross" letters are received.
- f. Pursuant to Secretarial Order 2974 of April 30, 1975, check the following:
1. FWS notified _____.
 2. FWS comment received _____.
 3. BLM notified _____.
 4. BLM comment received _____.
 5. Environmental assessment required _____.

III. BLM Application

- a. The pipeline must be able to be subjected to common carrier provisions (i.e., no downstream production facilities or downstream pipelines which could not be subjected to common carrier provisions).

IV. DOT Pipelines

- a. The pipelines are shoreward of the outlet flange at the first process facility (If yes, include 40 CFR 192 for gas P/L or 49 CFR 195 for oil P/L in approval).

V. DOI Pipelines

- N/A a. Pipelines not covered by IV above.

B. Verify that the information shown on the safety equipment schematic drawing contains the following:

- I. The pipeline leaving the platform receiving production from the platform is equipped with high and low pressure sensors located upstream of departing check valves to directly or indirectly shut-in the well or wells on the platform.
- N/A II. The pipeline delivering production to production facilities on the platform is equipped with an automatic fail close valve tied into the automatic and remote shut-in system.
- N/A III. The pipeline crossing the platform which does not deliver production to the platform, but which may or may not receive production from the platform, is equipped with high and low pressure sensors connected to an automatic fail close valve located in the upstream portion of the pipeline at the platform. In addition, the sensors are tied into either the platform's automatic and remote shut-in system or an independent remote shut-in system.
- IV. The pipeline boarding the ^{← STI} platform is equipped with a check valve.
- V. The pipeline leaving the platform is equipped with a check valve.
- N/A VI. The pipeline pump is shown as well as its associated high and low pressure shut-in device.
- VII. If pipeline pilots are located on any process vessel, all flow restrictions (backpressure valves, chokes) downstream of pilots are indicated on the schematic.
- VIII. Pressure source is drawn into the schematic with the following:
- a. Source Separator.
- b. Maximum source pressure, psig 2000.
- IX. The rated working pressures of all separators, pumps, compressors, valves, flanges, and fittings upstream of and including the boarding automatic fail close valve are shown.

C. Verify that the location plat depicts the following:

- I. Location of P/L
- II. Length of P/L
- III. Size of P/L
- IV. Type of service
- V. Direction of flow

D. Verify that the information given on the submitted data sheet is complete; and calculate the $MAOP_{sc}$, $MAOP_{rc}$, $MAOP_{p/l}$.

I. General information for calculating $MAOP_{sc}$, $MAOP_{rc}$, etc.

- a. Size of P/L, inches 8.625.
- b. Weight of P/L, lbs./ft. 43.39.
- c. Grade of P/L API-5L "B".
- d. Wall thickness, inches 0.500.
- e. Size of riser, inches 8.625 → from schematic.
- f. Weight of riser, lbs./ft. 43.39.
- g. Grade of riser API-5L "B".
- h. Wall thickness of riser, inches 0.500.
- i. Minimum WP rating of piping, fittings, valves, psig 2160.
- j. Hydrostatic test pressure (HTP), psig 3855_{MAX}, 3800_{MIN}.
- k. Hold time, hrs. 24.
- l. Classification of P/L (oil or gas) gas.

II. DOI Pipelines

a. IP @ SMYS for submerged pipeline = $\frac{2st}{D}$

b. (.72 x IP @ SMYS) for submerged pipeline = _____ (MAOP_{sc})

c. IP @ SMYS for riser = $\frac{2st}{D}$ = _____

d. (.60 x IP @ SMYS) for riser = _____ (MAOP_{rc})

e. See Ii above (MAOP_{pfv}) = _____ (MAOP_{pfv})

f. Are b, d, and e \geq MSP
_____ \geq _____

NOTE: If not, a departure is necessary requiring redundant safety equipment.

A written request for a departure has been received and the redundant safety equipment is satisfactory.

g. Is $1.25 \text{ MSP} \leq \text{HTP} \leq .95 (\text{IP @ SMYS for smaller IP of a and c above})$
_____ \leq _____ \leq _____

NOTE: If not, inquire of the operator as to what he considers a limit of testing as a percentage of IP @ SMYS.

Operator's answer _____ % of IP @ SMYS (for smaller IP)

h. HTP/1.25 = _____

i. Is HTP hold time \geq 2 hours

j. MAOP_{p/1} = the smallest of b, d, e, and h above
_____ (MAOP_{p/1})

III. DOT Pipelines

a. IP @ SMYS for submerged pipeline = $\frac{2st}{D} = \frac{2(35000)(.5)}{8.625} = 4057.97$

b. (.72 x IP @ SMYS) for submerged pipeline = 2922 (MAOP_{sc})

c. IP @ SMYS for riser = $\frac{2st}{D} = \frac{2(35000)(.5)}{8.625} = 4057.97$

d. For oil P/L (.60 x IP @ SMYS) for riser = _____ (MAOP_{rc})

For gas P/L (.50 x IP @ SMYS) for riser = 2029

e. See ii above 2160 (MAOP_{pfv})

f. Are b, d, and e \geq MSP

2029 \geq 2000

NOTE: If not, a departure is necessary requiring redundant safety equipment.

N/A A written request for a departure has been received and the redundant safety equipment is satisfactory.

g. Limit of Testing

N/A 1. For oil P/L:

Is $1.25 \text{ MSP} \leq \text{HTP} \leq .95 \text{ (IP @ SMYS for smaller IP of a and c above)}$

_____ \leq _____ \leq _____

2. For gas P/L riser component:

Is $1.50 \text{ MSP} \leq \text{HTP of riser} \leq .95 \text{ (IP @ SMYS of c above)}$

3000 \leq 3800_{min} \leq 3855^{3855max}

3. For gas P/L submerged component:

Is $1.25 \text{ MSP} \leq \text{HTP of submerged component} \leq .95 \text{ (IP @ SMYS of a above)}$

2500 \leq 3800_{min} \leq 3855^{3855max}

NOTE: If not, inquire of the operator as to what he considers a limit of testing as a percentage of IP @ SMYS.

N/A Operator's answer _____ % of IP @ SMYS (for smaller IP)

h. MAOP_{p/1} based on HTP

1. For oil P/L HTP/1.25 = N/A

2. For gas P/L riser component HTP/1.5 = 2533 } using
of riser HTP_{min}

3. For gas P/L submerged component HTP/1.25 = 3040
of submerged component

i. For oil P/L Is HTP hold time \geq 24 hours

For gas P/L Is HTP hold time \geq 8 hours YES

j. MAOP_{p/1} = the smallest of b, d, e, and h above

2029

(MAOP_{p/1})

E. Verify that the information given on the submitted data sheet is complete; and calculate the life expectancy of the pipelines corrosion protection ($LE_{p/1}$)

I. General Information for Calculating $LE_{p/1}$

a. Type of corrosion protection (platform anodes, P/L anodes, or rectifiers)

b. If platform anodes are used:

1. Type of anode _____

2. Weight of unit anode, lbs. _____

c. If pipeline anodes are used:

1. Type of anode Zinc

2. Spacing interval, ft. 300

3. Weight of unit anode, lbs. 170

II. Calculated Life Expectancy of Corrosion Protection

N/A a. If platform anodes are used, are they considered adequate _____

b. If pipeline anodes are used:

$$LE_{p/1} = 3.82 \times 10^4 \times W^0 / DIR? = \underline{96.5}$$

W^0 = weight of one anode, pounds = 170

D = outside diameter of pipe, inches 8.625

I = interval = length of pipe, feet ÷ total number of anodes = 300

R = consumption rate, lbs./amp-yr. 26

c. Is our calculated $LE_{p/1} \geq 20$ years

F. Verify that the information given on the submitted data sheet is complete; and calculate the specific gravity of the pipeline ($SG_{p/1}$)

I. General Information pertaining to $SG_{p/1}$

- a. Description of pipelines protective coating Bituminous enamel & X-teu coat
- b. Description of risers protective coating SAME
- c. Description of pre-concrete coating N/A
- d. Density of concrete, lbs./cu. ft. N/A
- e. Thickness of concrete, inches N/A
- f. Thickness of asphalt/somastic N/A
- g. Gravity or density of products 0.60
- For gas 0.60 (air = 1.0)
- For oil/condensate _____ ° API, _____ (water = 1.0)
- h. Given $SG_{p/1}$ 1.35

II. $SG_{p/1}$

✓ a. Epoxy-coated pipelines:

$$SG_{p/1} = 2.865 W/D^2 = 2.865 (43.39) / (8.625)^2 = 1.67$$

W = weight of bare pipe, lbs./ft.

D = diameter of pipe, inches

N/A b. For weighted pipelines:

$$SG_{p/1} = \frac{d_c}{d} + \frac{k_2}{(T-k_1)^2} \left(\frac{W+P}{k_3} - \frac{d_c}{d} \right)$$

d_c = density of concrete, lbs./ft.³

d = density of fluid in which pipeline is submerged, lbs./ft.³

k_1, k_2, k_3 = coefficients from tables

T = thickness of concrete coating, inches

W = weight of bare pipe, lbs./ft.

P = weight of double enamel coat and felt wrap, or weight of asphaltmastic coating, lbs./ft.

$$SG_{p/1} = \underline{1.67}$$

✓ c. Is our calculated SG \approx (operator's given SG

$$\underline{1.67} \approx \underline{1.70} \rightarrow \text{as per calculation sheet.}$$

NOTE: These values should be approximately the same. If not, resolve. If the SG is close to a value of 1, the pipeline is unacceptable and must be weighted with concrete or anchored securely to the bottom.

G. Verify the following general information:

I. Water Depth, ft. 40 (Max) — (Min)

II. Burial depth, ft. 3' (min), 8' (max)

III. Maximum Operating Pressure (MOP) 2000 (MAOP = 2029)

IV. Capacity 60 MMSCFD